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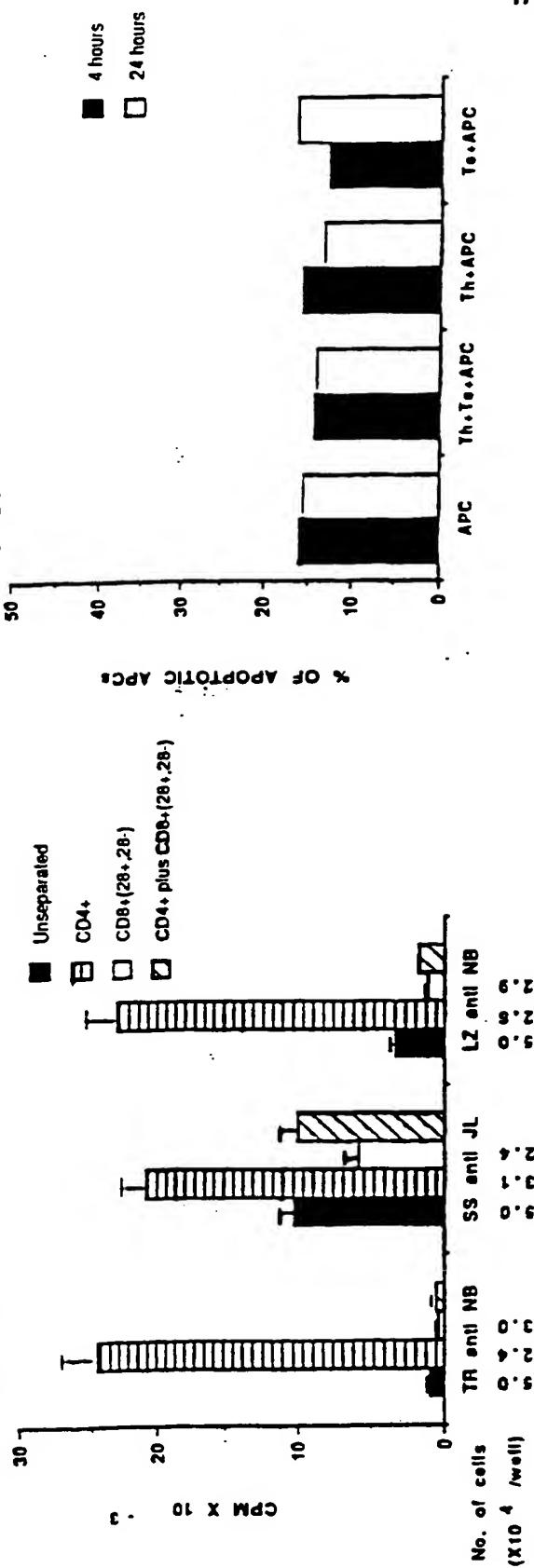
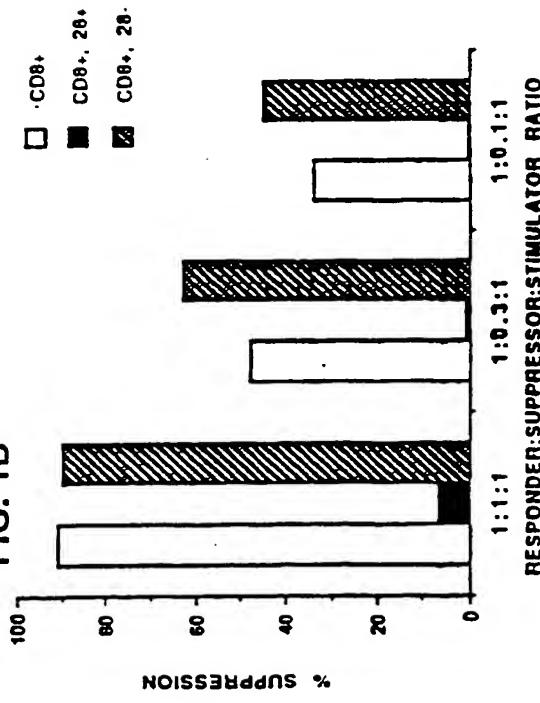
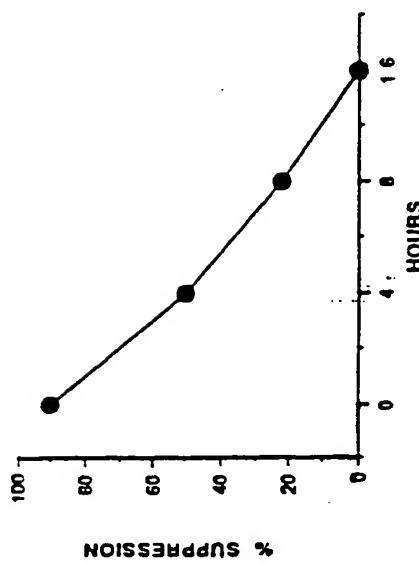
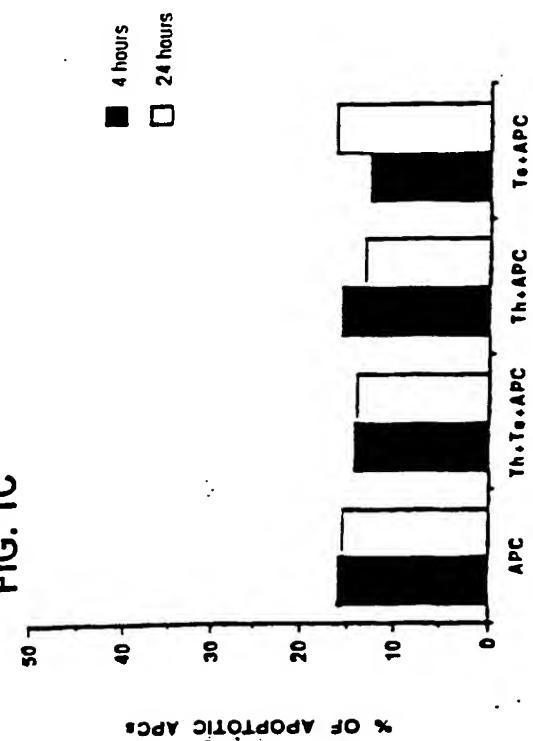
FIG. 1A**FIG. 1B****FIG. 1C**

FIG. 2A

A

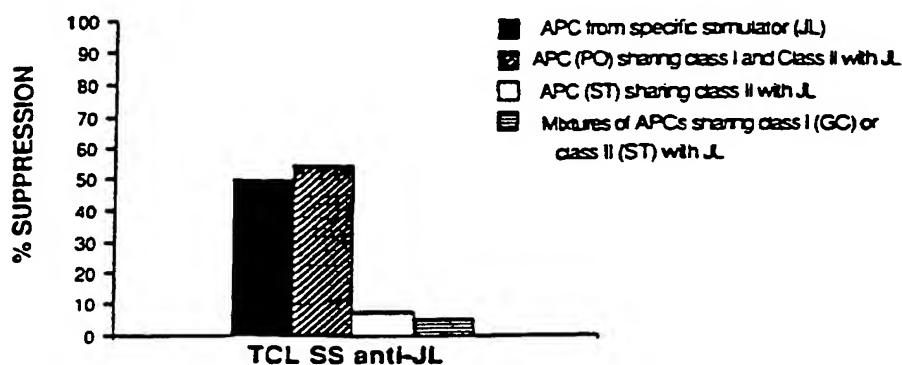
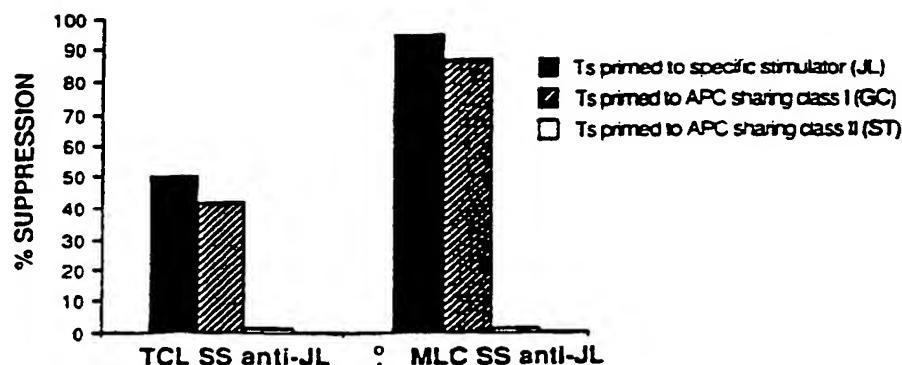


FIG. 2B

B



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FIG. 3

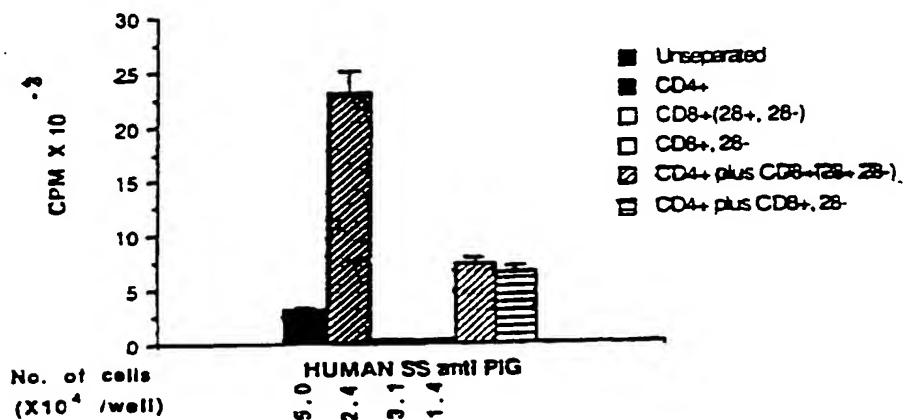
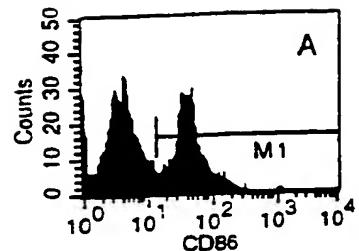
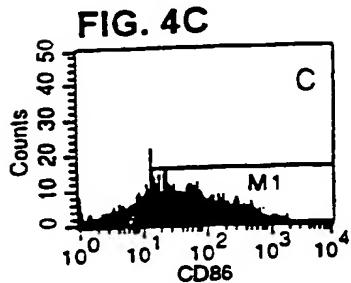
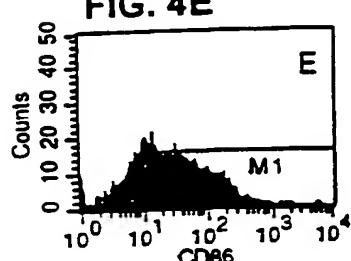


FIG. 4A

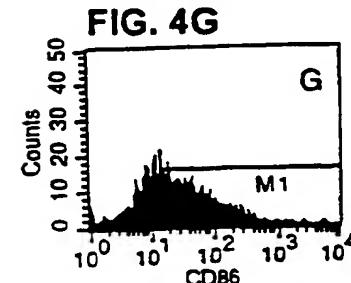
40 47



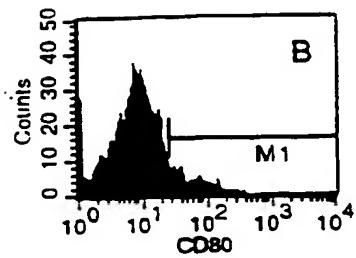
73 123



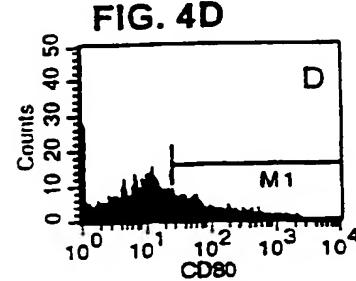
63 78



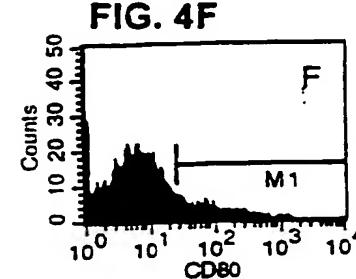
61 74

FIG. 4B

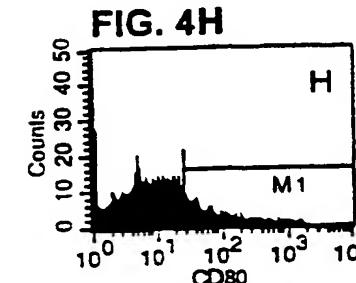
8 59



27 144

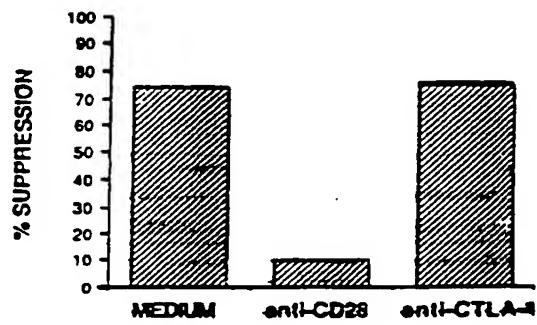


13 128



17 110

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FIG. 5

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FIG. 6A

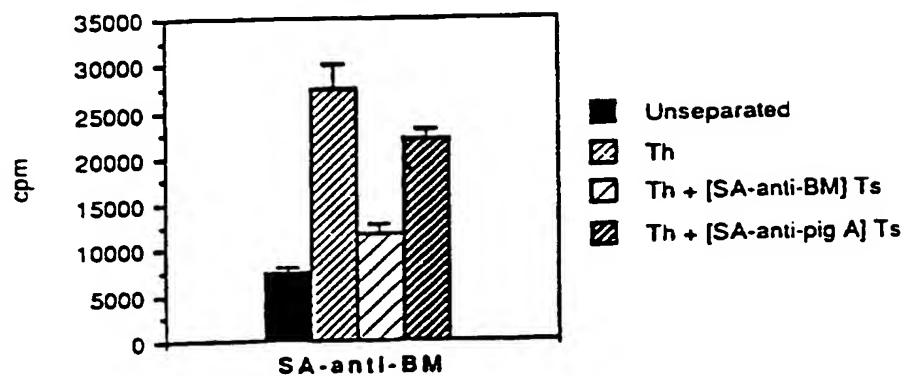
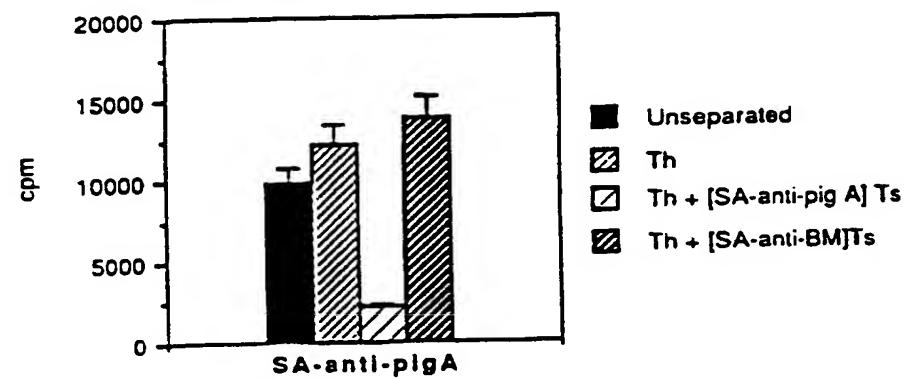
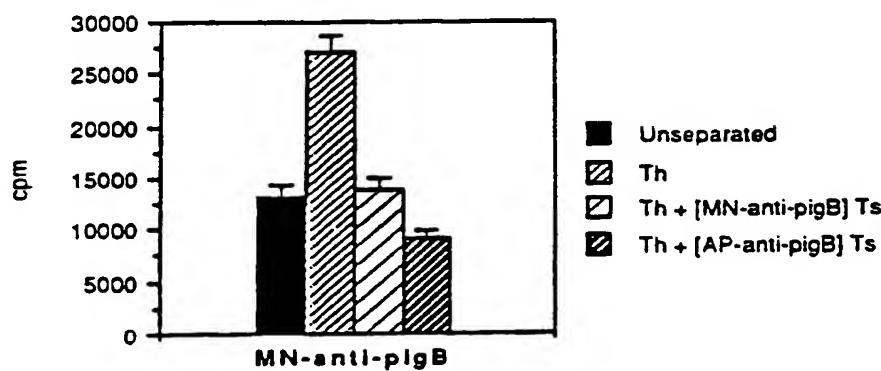
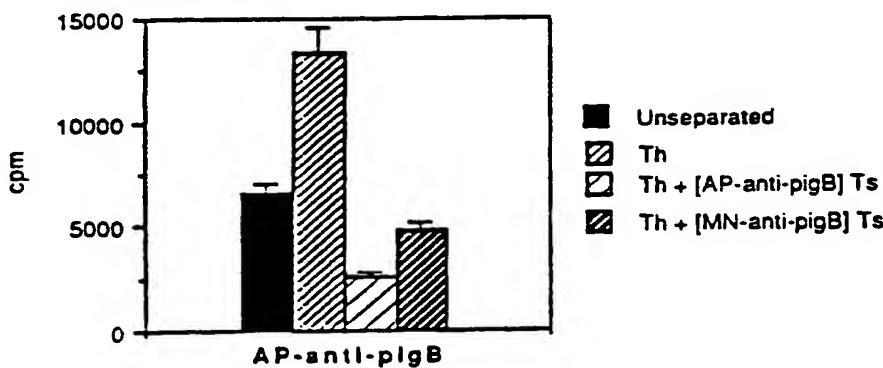


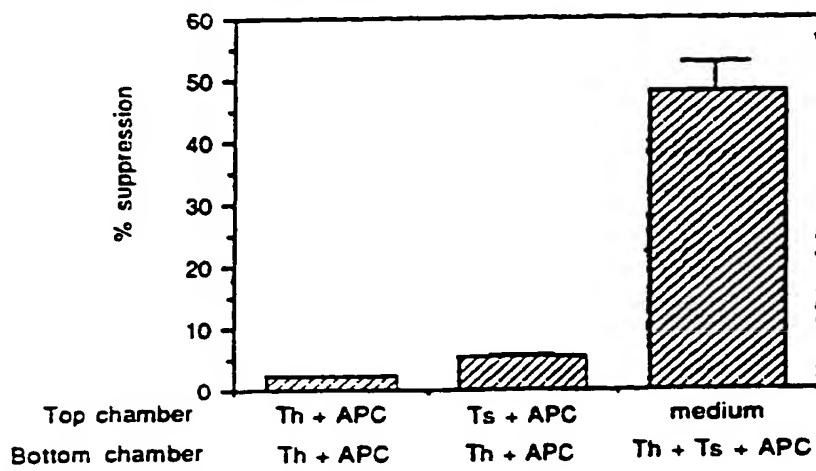
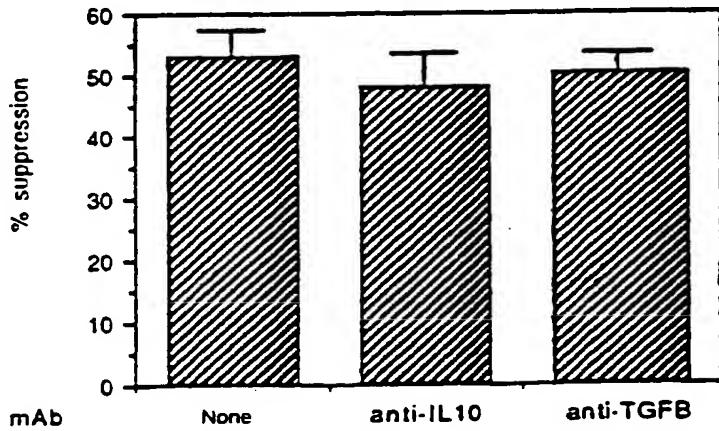
FIG. 6B



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FIG. 7A**FIG. 7B**

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FIG. 8A**FIG. 8B**

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FIG. 9A
T helper cells

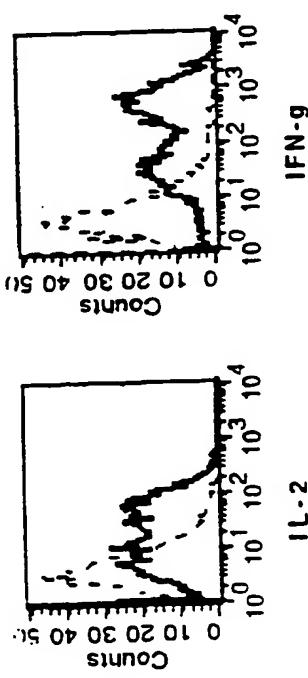


FIG. 9B

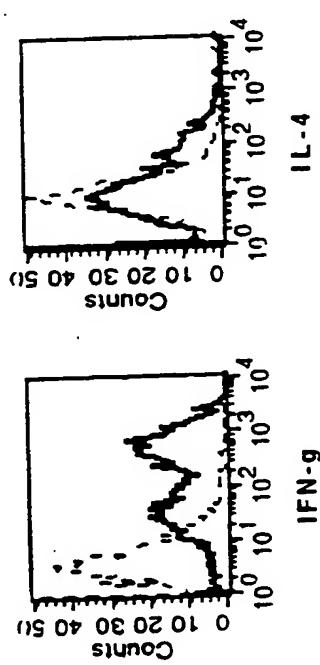


FIG. 9C

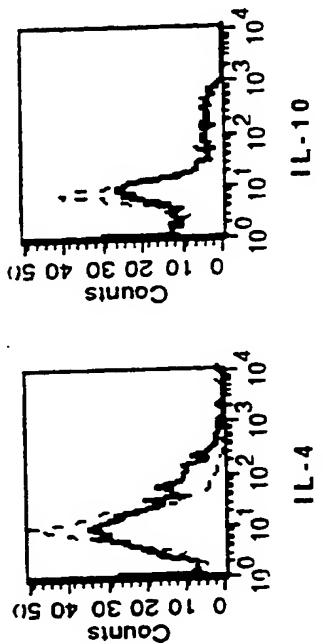
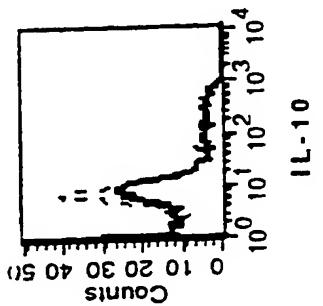


FIG. 9D



T suppressor cells

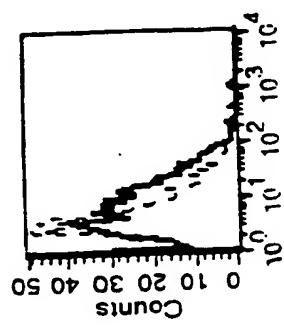


FIG. 9E

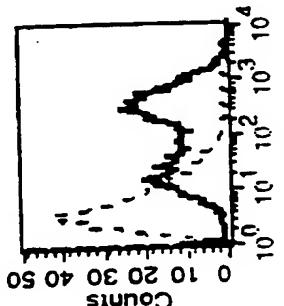


FIG. 9F

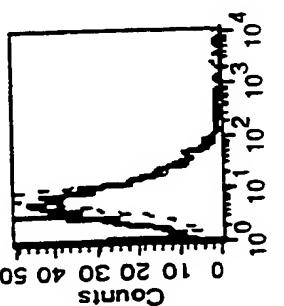


FIG. 9G

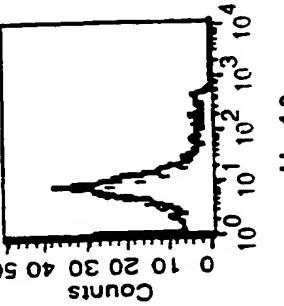


FIG. 9H

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FIG. 10A

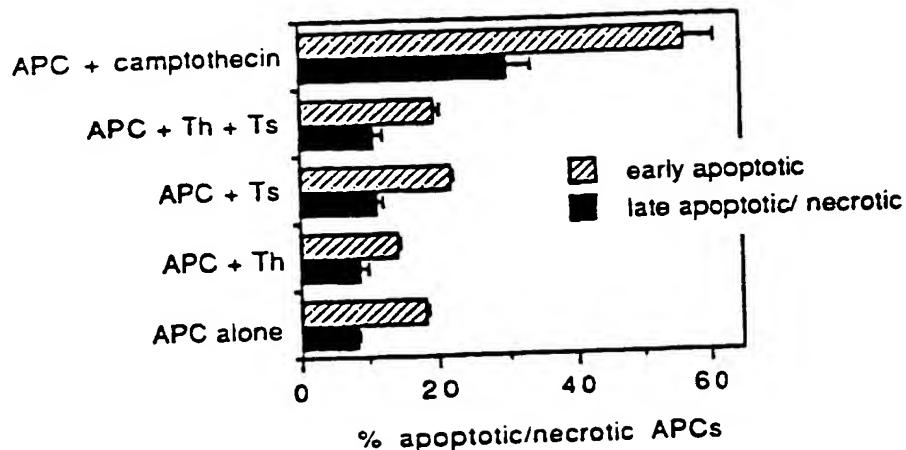


FIG. 10B

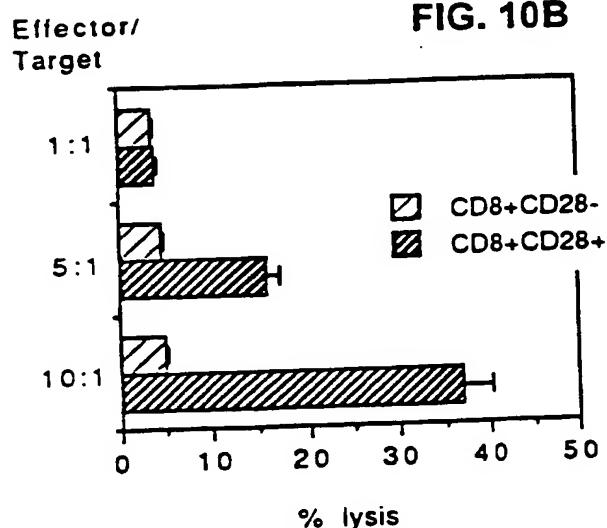
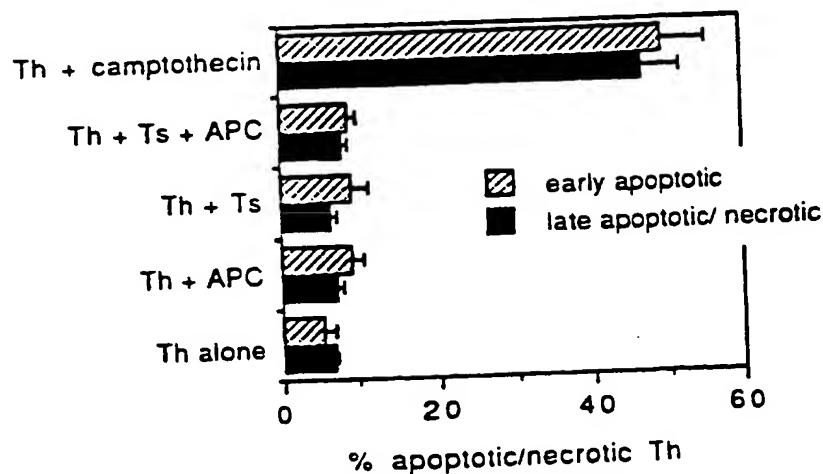


FIG. 10C



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FIG. 11A

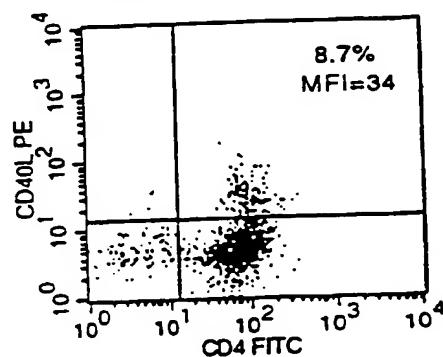


FIG. 11B

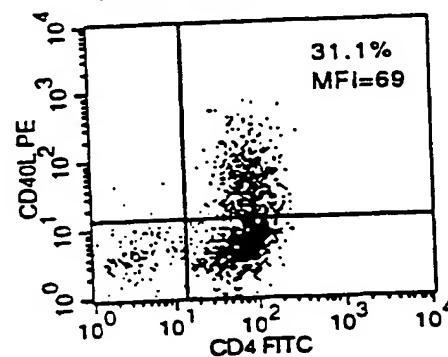


FIG. 11C

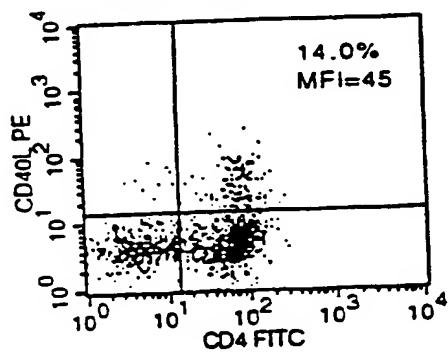
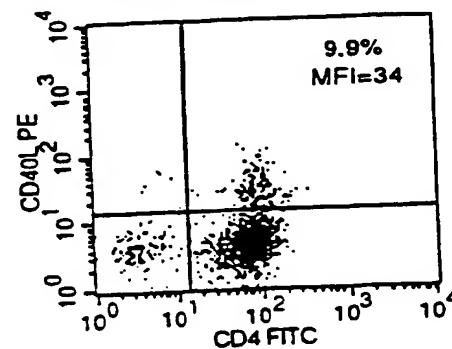


FIG. 11D



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FIG. 12

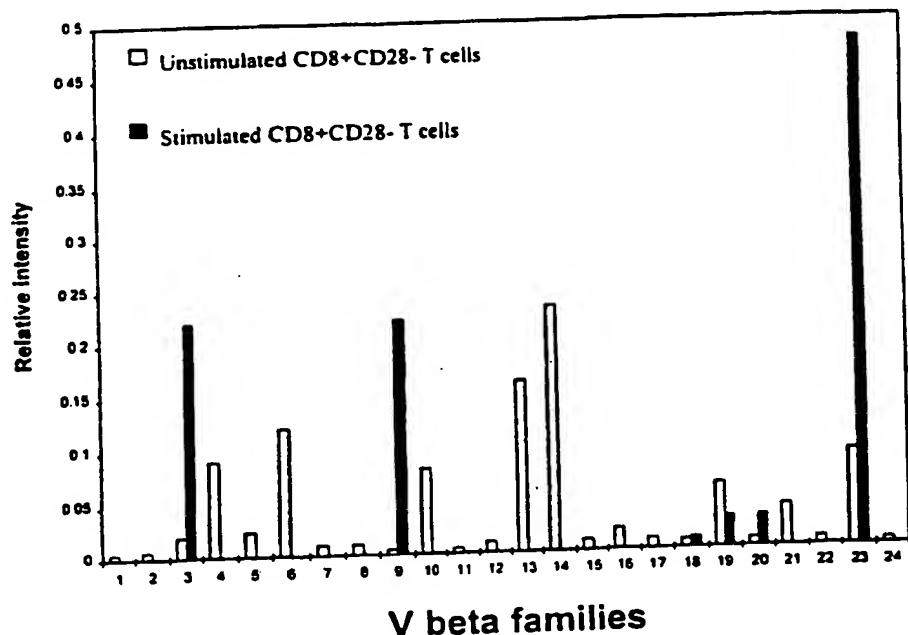
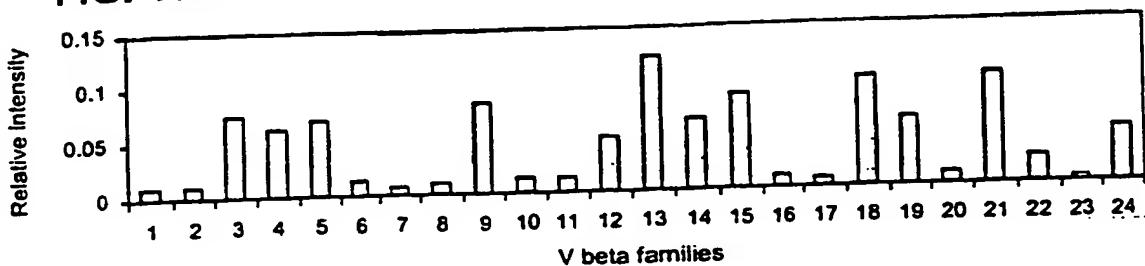
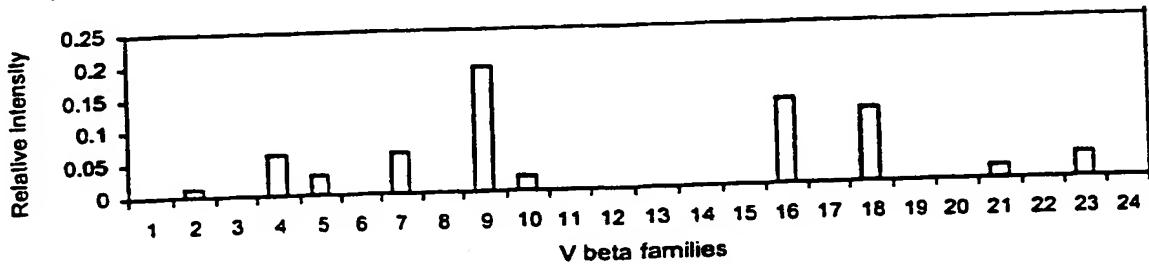
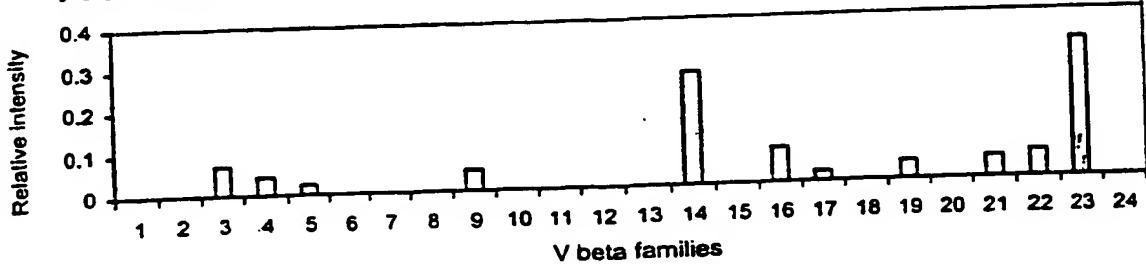
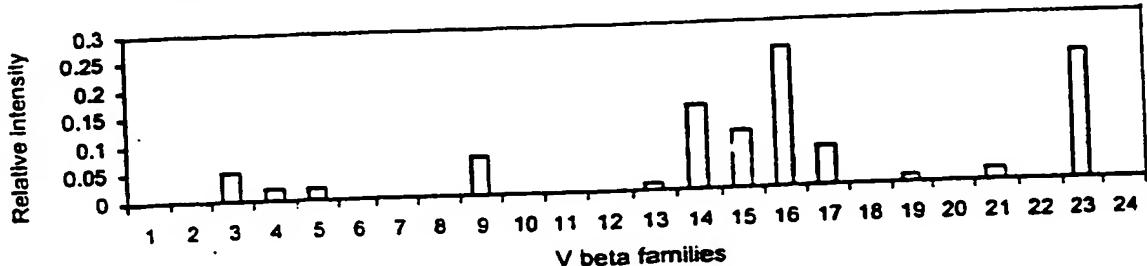
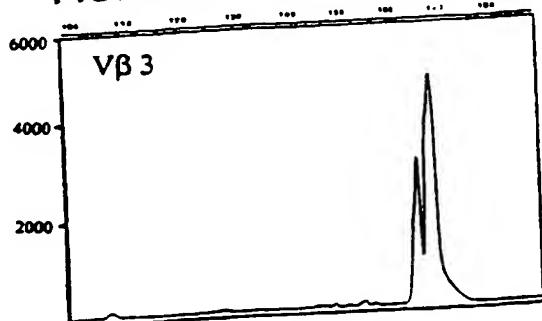
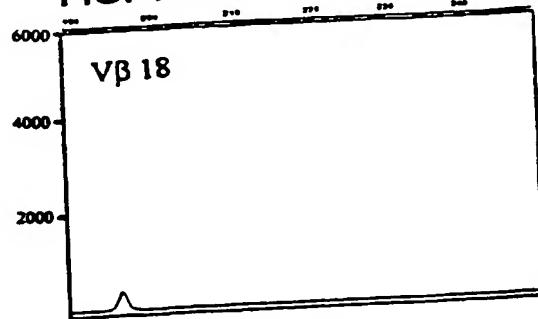
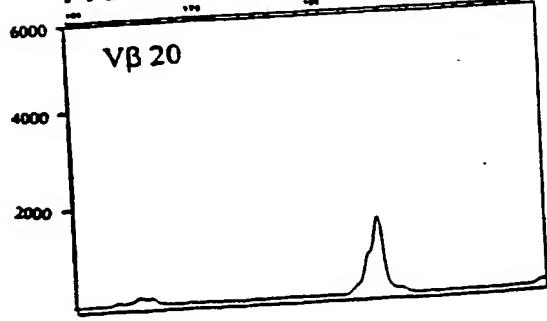
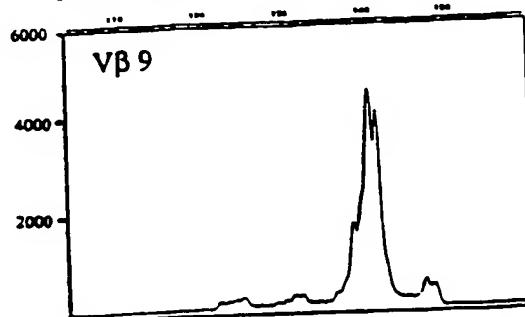
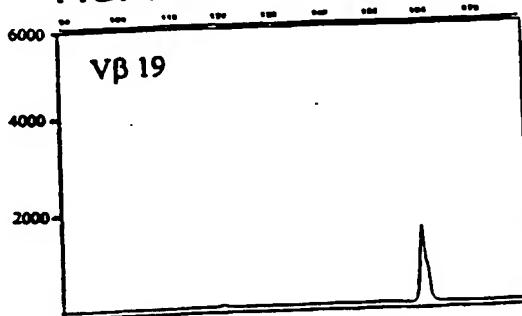
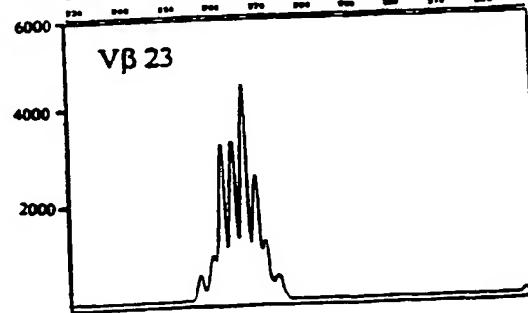


FIG. 13A**FIG. 13B****FIG. 13C****FIG. 13D**

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FIG. 14A**FIG. 14D****FIG. 14E****FIG. 14B****FIG. 14C****FIG. 14F**

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FIG. 15A

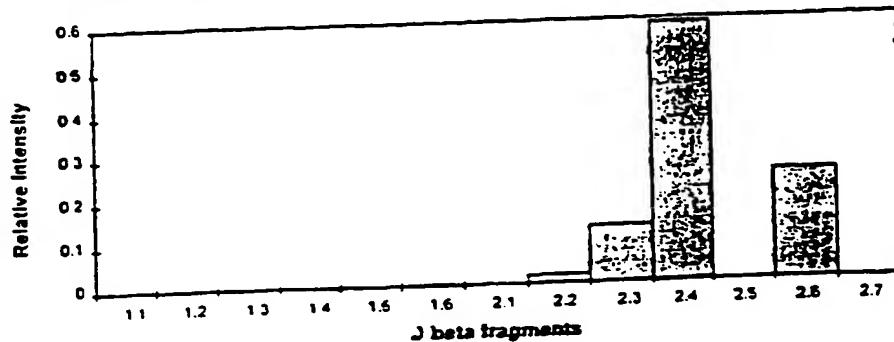


FIG. 15B

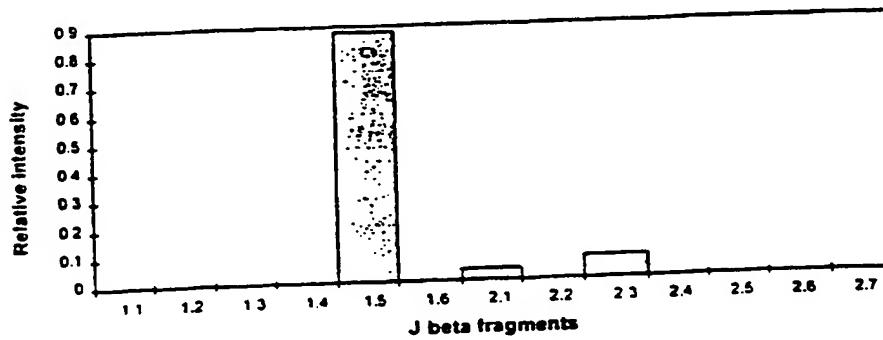
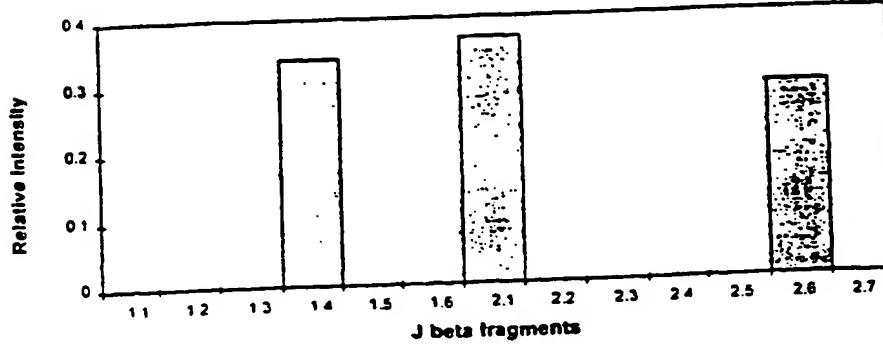
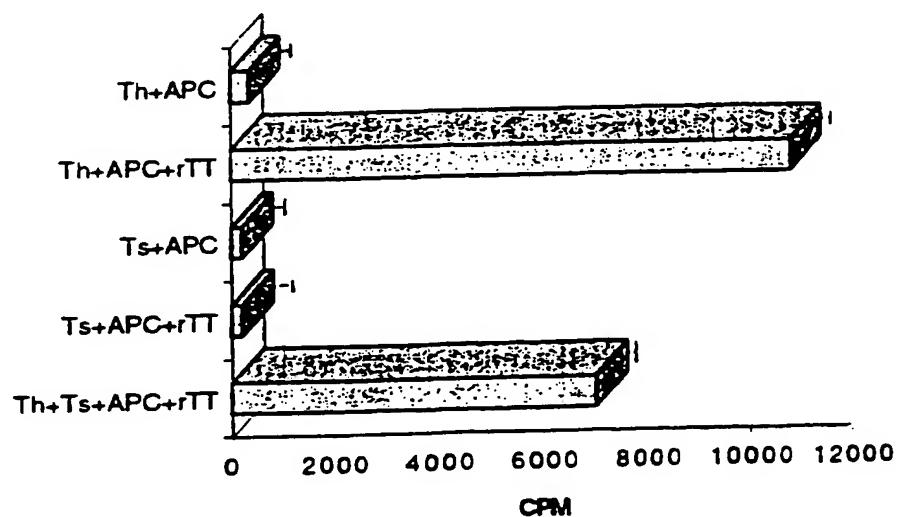


FIG. 15C



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FIG. 16



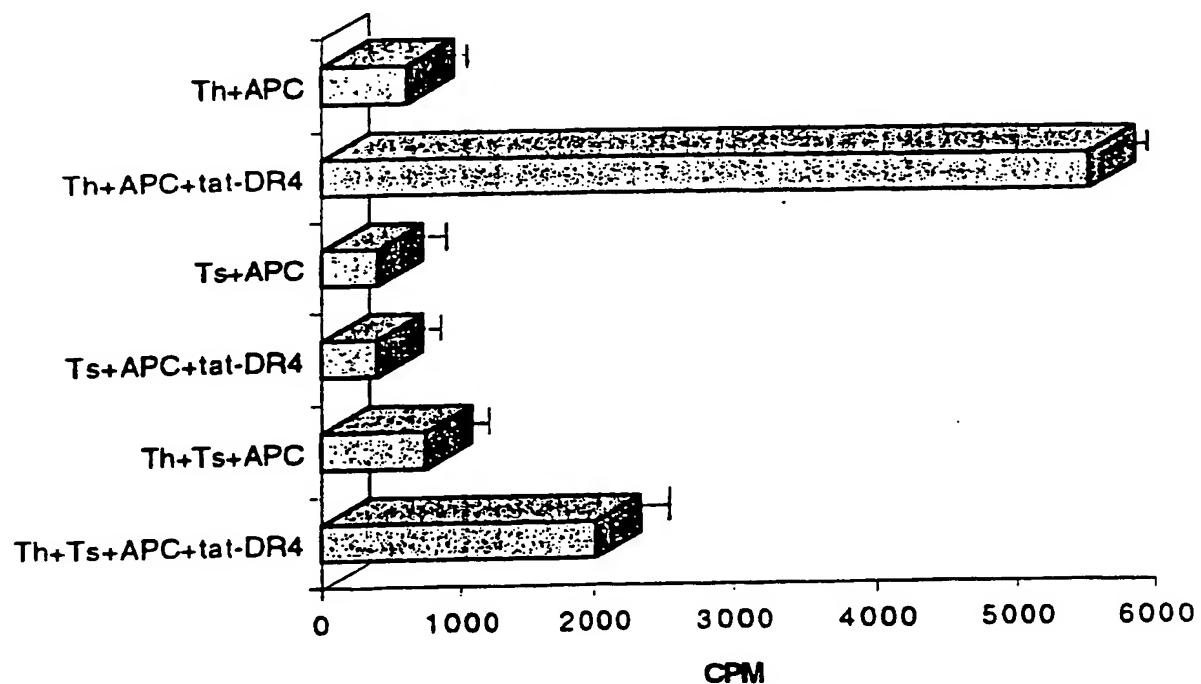
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FIG. 17



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FIG. 18A

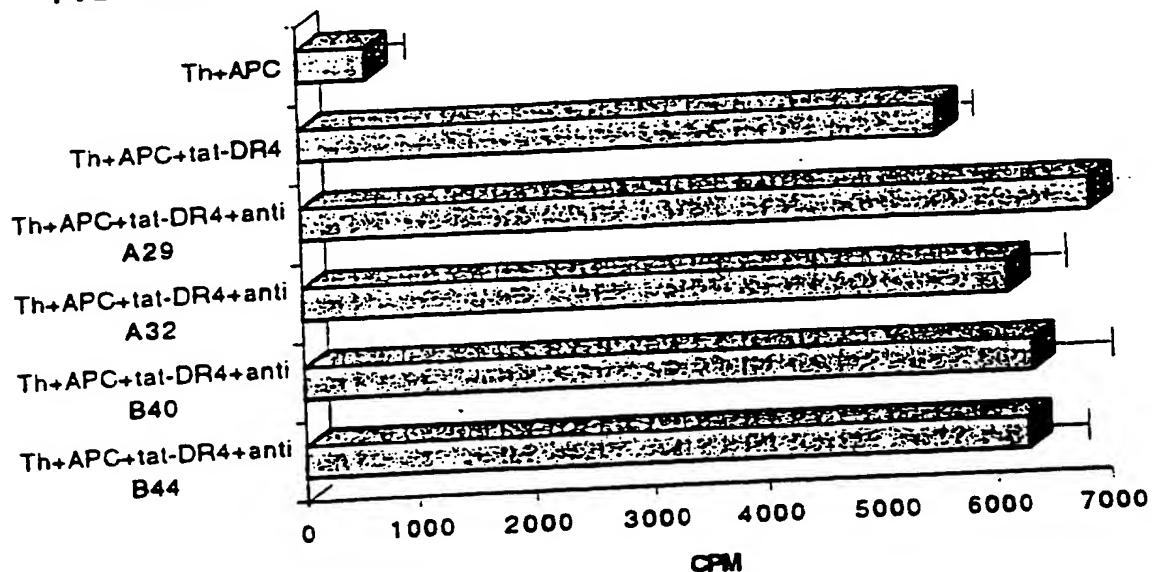
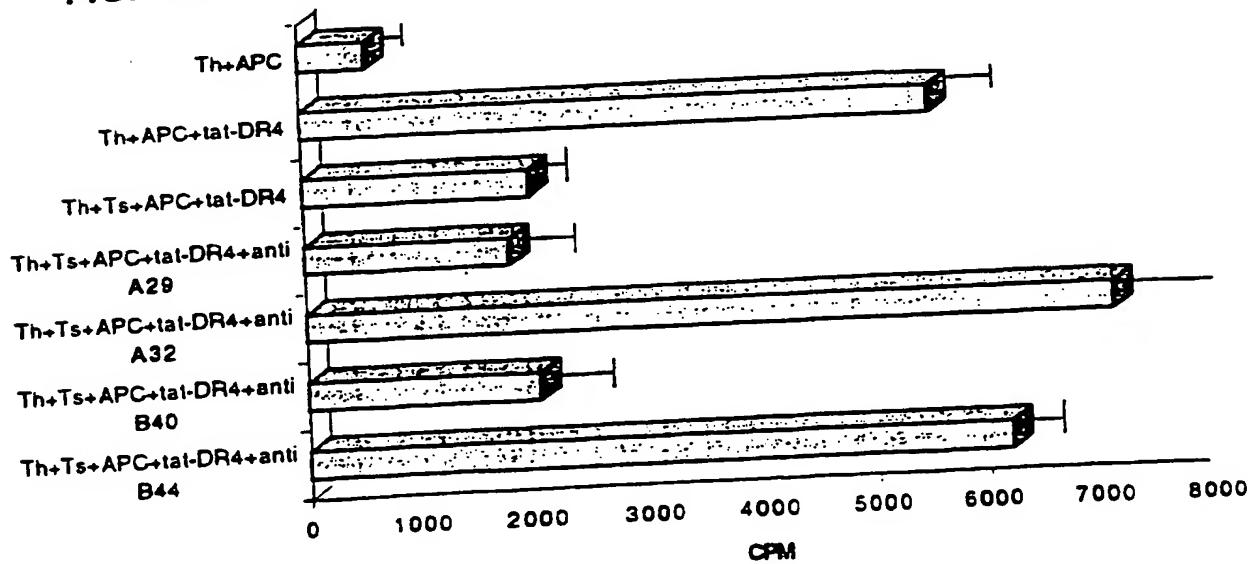
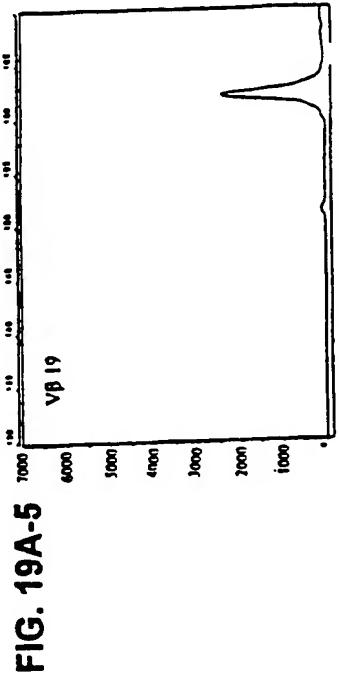
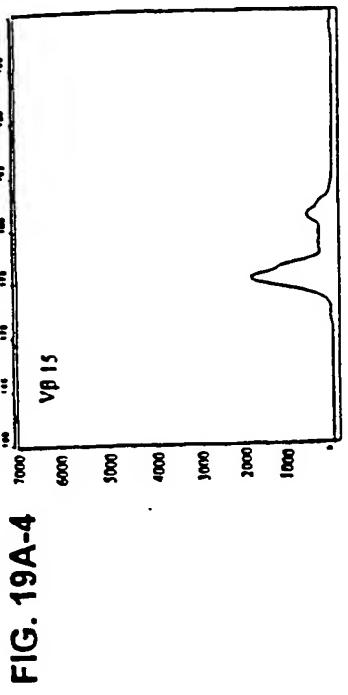
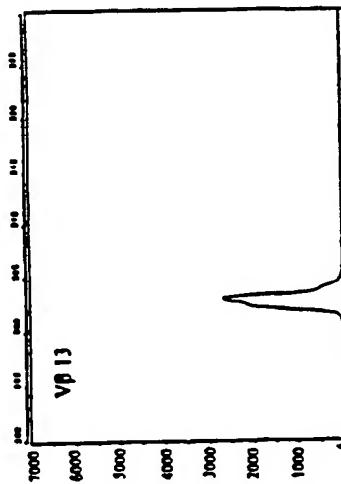
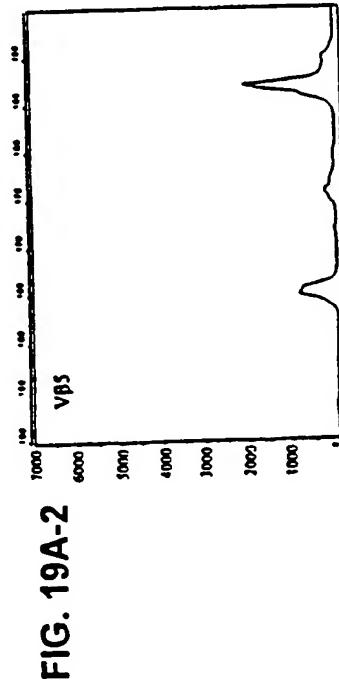
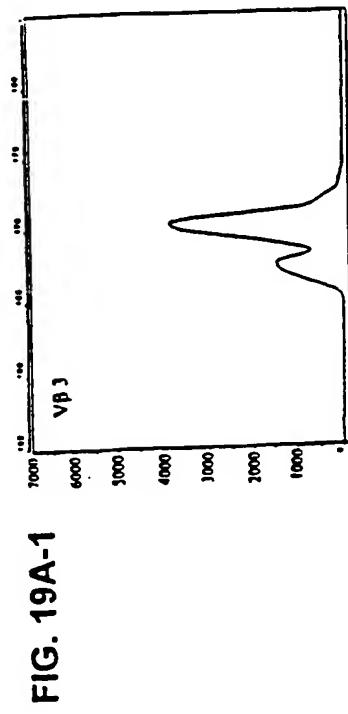


FIG. 18B



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1000 900 800 700 600 500 400 300 200 100

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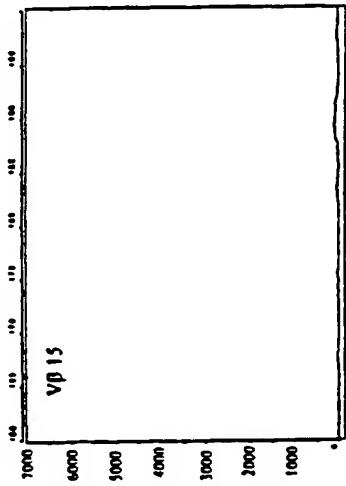


FIG. 19B-4

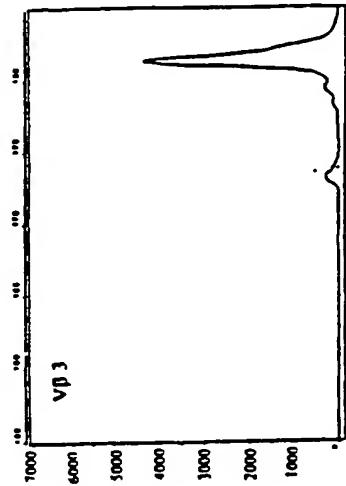


FIG. 19B-1

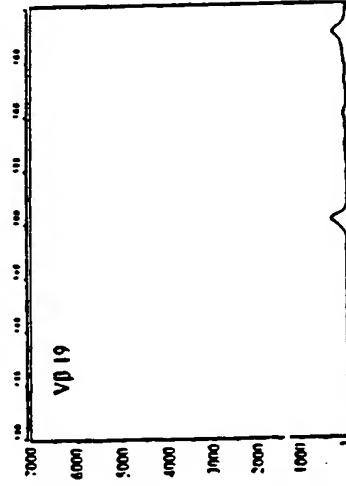


FIG. 19B-5

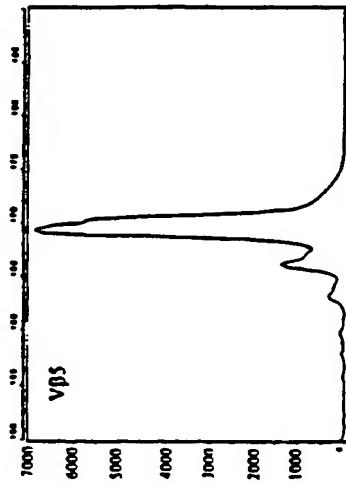


FIG. 19B-2

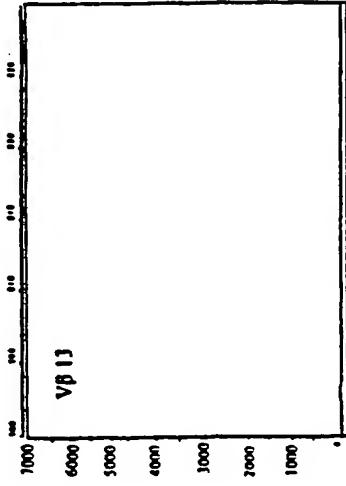


FIG. 19B-3

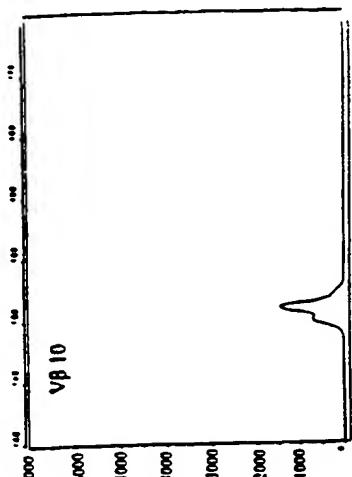


FIG. 19C-4

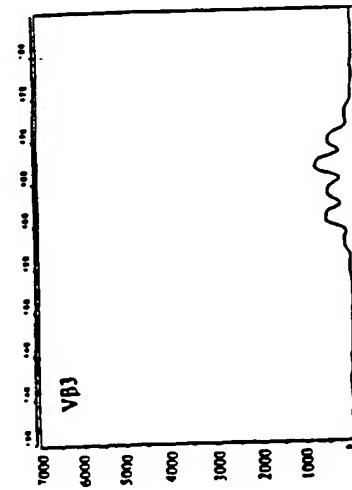


FIG. 19C-1

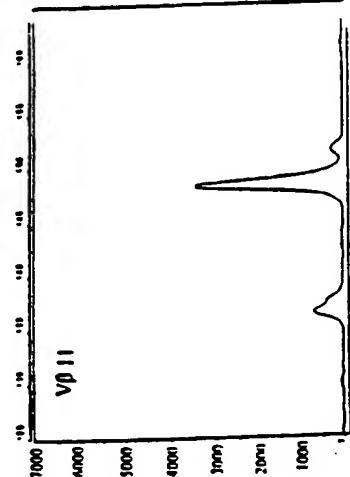


FIG. 19C-5

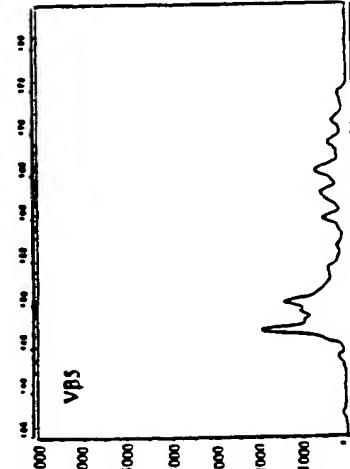


FIG. 19C-2

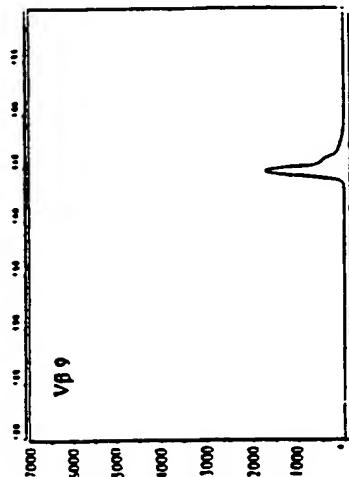


FIG. 19C-3

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FIG. 20A

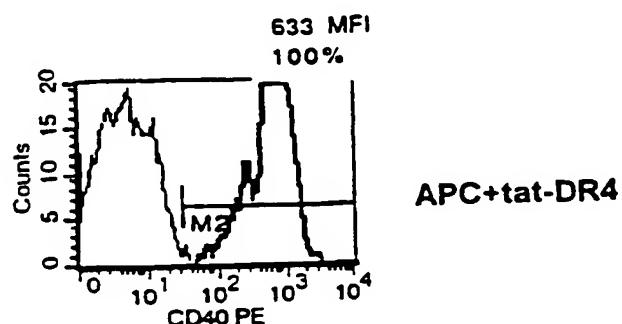


FIG. 20B

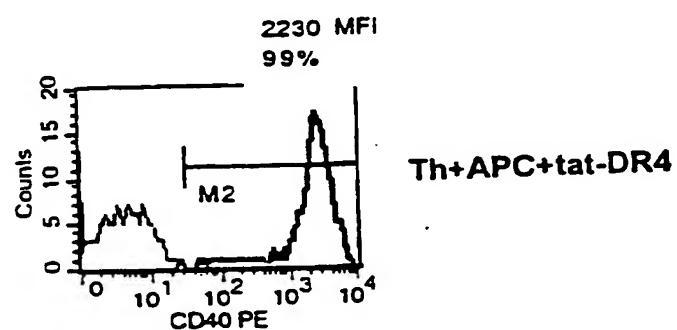


FIG. 20C

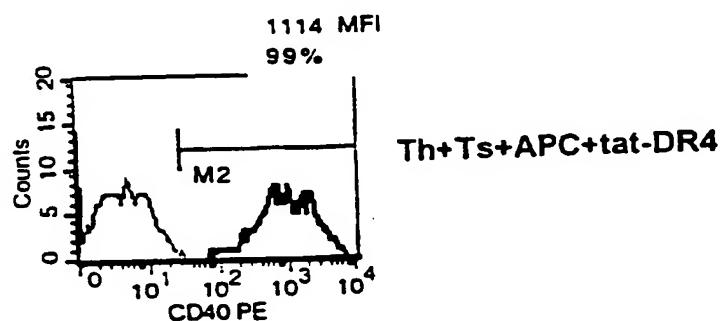
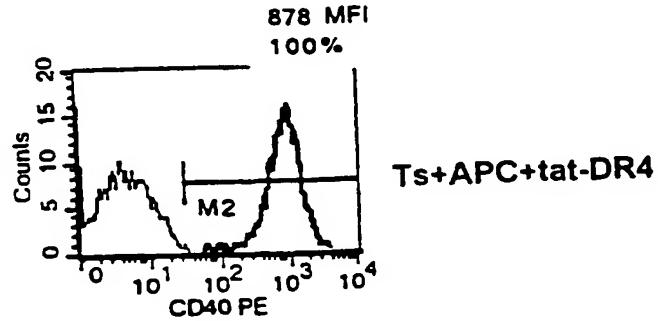


FIG. 20D



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CD80

FIG. 20E

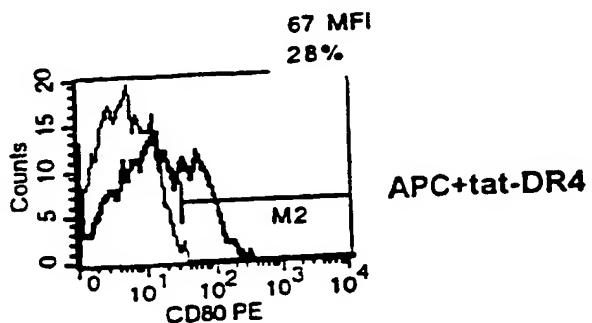


FIG. 20F

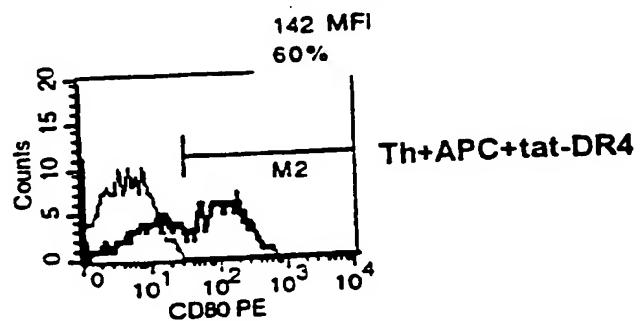


FIG. 20G

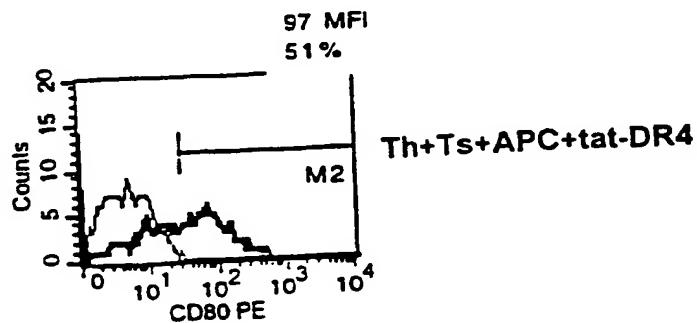
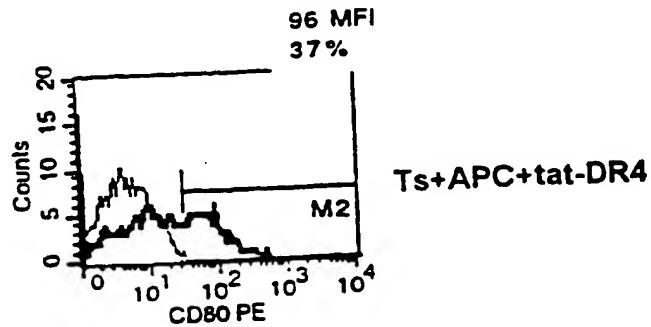


FIG. 20H



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FIG. 20I

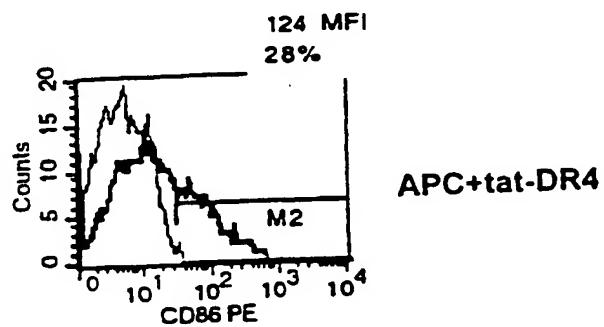


FIG. 20J

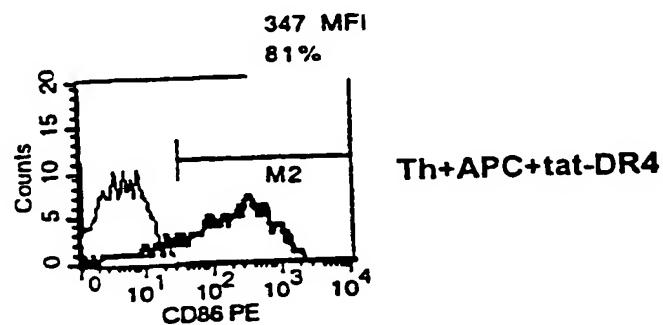


FIG. 20K

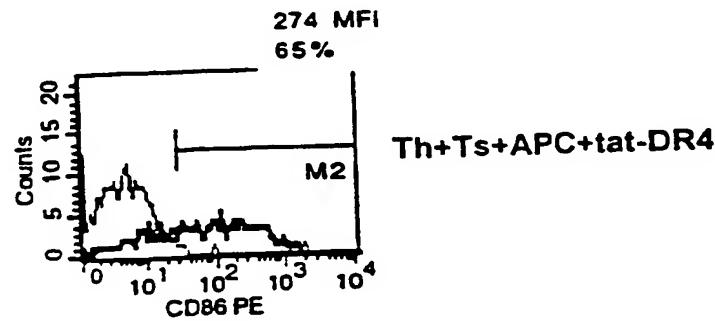
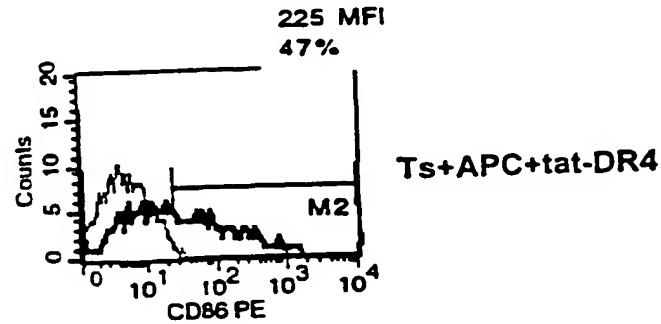


FIG. 20L



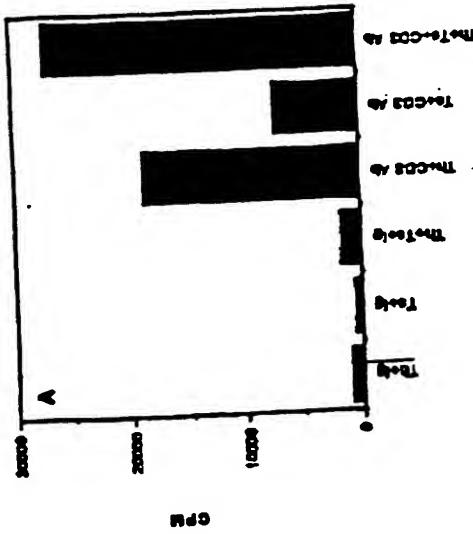
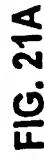
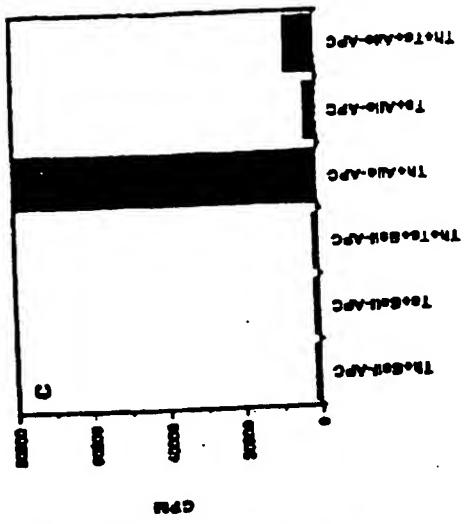
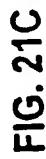


FIG. 21D

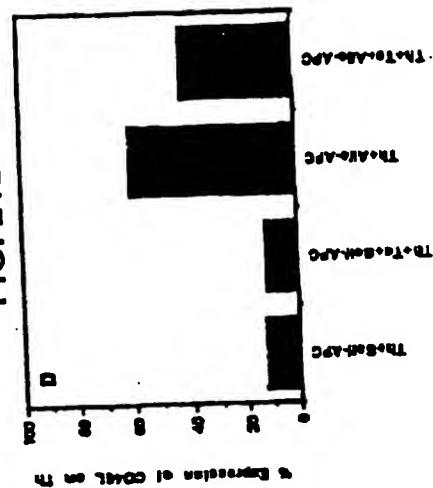
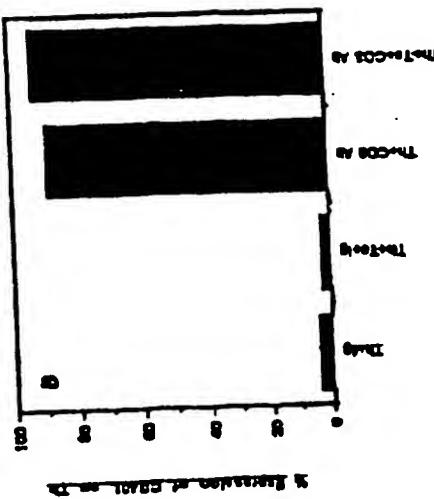


FIG. 21B



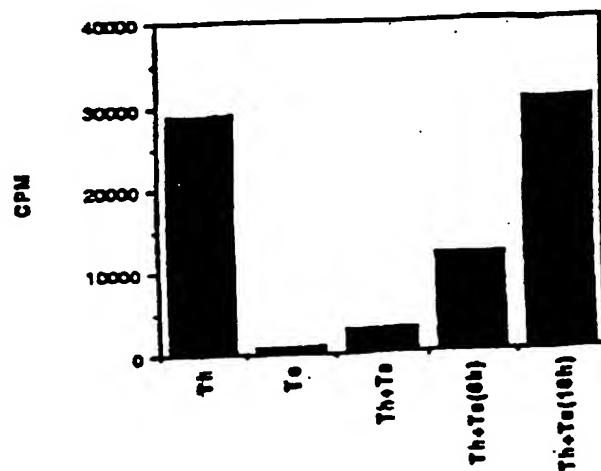
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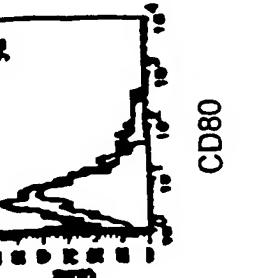
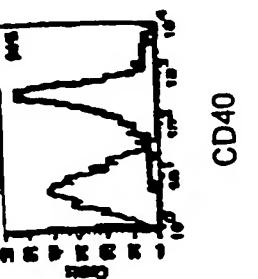
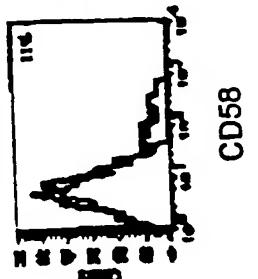
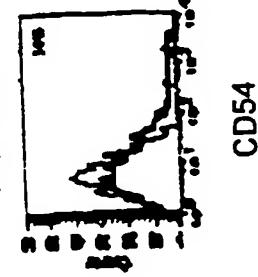
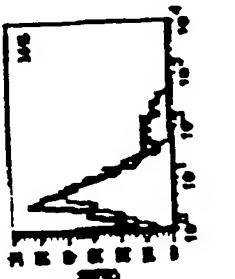
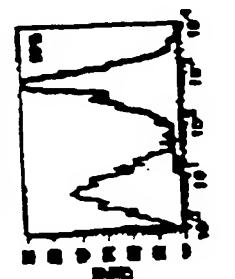
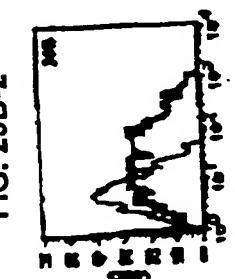
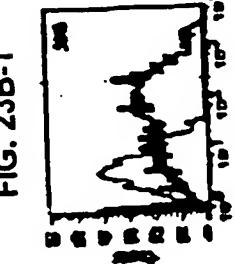
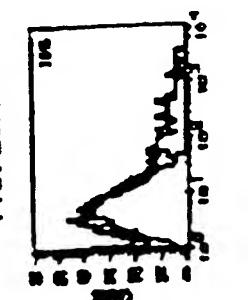
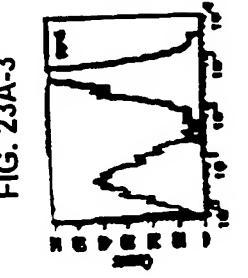
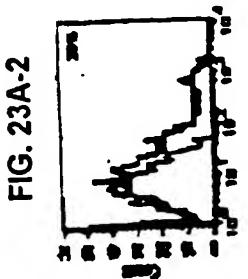
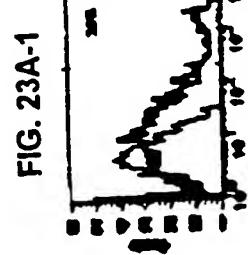
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FIG. 22





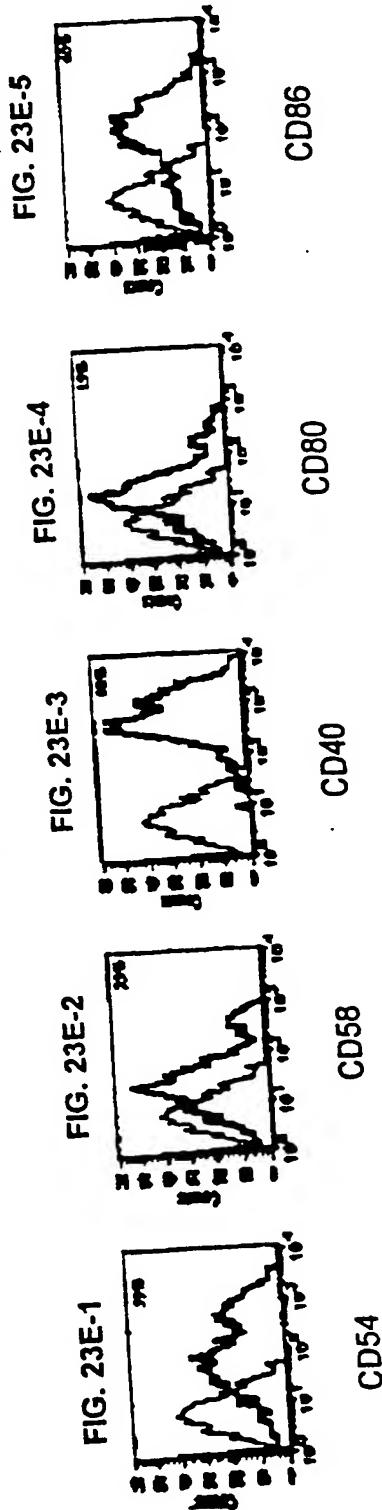
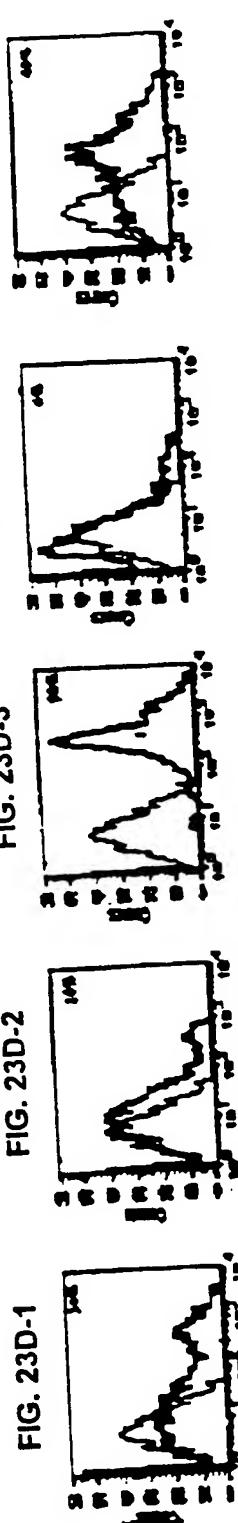
CD86

CD80

CD40

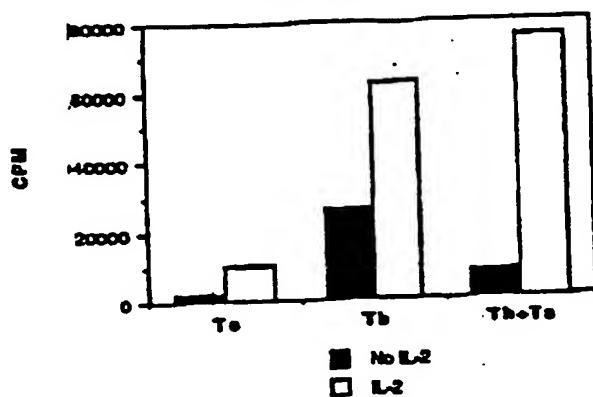
CD58

CD54



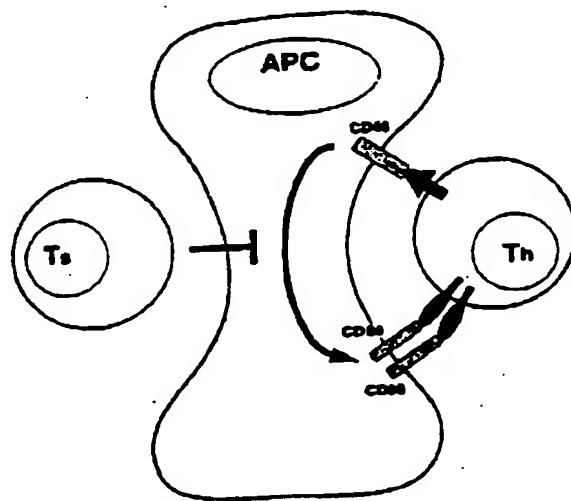
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FIG. 24



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FIG. 25



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FIG. 26

HLA A, B and DR Antigen Values and Split Equivalences

A LOCUS	EQUIVALENT	B LOCUS	EQUIVALENT	DR LOCUS	EQUIVALENT
1	1	6	6	1	1
2	2	7	7	2	2,15,16
3	3	8	8	3	3,17,18
9	9	12	12	4	4
10	10,66	13	13	5	5,11,12
11	11	14	14,54,55	6	6,13,14
19	19,74	15	15,75,76,77	7	7
23	23	16	16	8	8
24	24	17	17,58	9	9
25	25	18	18	10	10
25	28	21	21	11	11,5
25	28,68,89	22	22,54,55,56	12	12,5
29	29	27	27	13	13,5
29	30	28	28	14	14,5
31	31	29	29	15	15,2
32	32	30	30	16	18,2
33	33	31	31	17	18,3
34	34	32	32	18	17,3
35	35	33	33	19	18,3
43	43	34	40,51	20	81
68	68,10	41	41	21	82
68	68,28	42	42	22	83
68	68,28	43	44	23	103
74	74,19	44	45	24	- 1403
88	88	45	46	25	- 1404
- 203	203	46	47	26	- 99
- 210	210	47	48		
- 2403	2403	48	49		
- 99	99	49	50		
		50	50		
		51	51		
		52	52		
		53	53		
		54	54		
		55	55		
		56	56		
		57	57		
		58	58,17		
		59	59		
		60	60		
		61	61,40		
		62	62		
		63	63		
		64	64,14		
		65	65,14		
		66	67		
		67	70,71,72		
		68	71,70		
		69	72,70		
		70	73		
		71	75,15		
		72	76,15		
		73	77,15		
		74	7803		
		75	3901		
		76	3902		
		77	4005		
		78	5102		
		79	5103		
		80	7801		
		81	8101		
		82	99		

-- Code 99 means not tested

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FIG. 27A

DRB Protein Sequences - 20th March 1998 - SGE Marsh ANRI

1 10 20 30 40 50 60 70 80 90 100

DRB1*0101 GDTRPRFLWQLKFECHFFNGTERVRLLERCIYNQEESVRFDSDVGEYRAVTELGRPDAEYWNSQK
 DRB1*01021 DLLEQRRAAVDTYCRHNYVGESFTVQRRVEPKVTVY AV
 DRB1*01022 *****
 AV***** I-DE
 DRB1*0103 ***** N V
 DRB1*0104 ***** I-A V Q
 DRB1*15011 P-R F-D-YF F I-A V Q
 DRB1*15012 ***** P-R F-D-YF F I-A V
 DRB1*15021 ***** P-R F-D-YF F I-A Q
 DRB1*15022 ***** F-D-YF F I-A
 DRB1*15023 ***** P-R F-D-YF F I-A
 DRB1*1503 P-R F-D-HF F I-A V Q
 DRB1*1504 ***** P-R F-D-YF F F-A V
 DRB1*1505 ***** P-R F-D-YF F A V
 DRB1*1506 ***** P-R F-D-YF F-A I-A V
 DRB1*16011 P-R F-D-YF F-D Q
 DRB1*16012 ***** P-R F-D-YF F-D
 DRB1*16021 P-R F-D-YF D Q
 DRB1*16022 ***** P-R F-D-YF D
 DRB1*1603 P-R F-D-YF F-D-A Q
 DRB1*1604 ***** P-R F-D-YF F-D-L
 DRB1*1605 ***** P-R F-D-YF I-D
 DRB1*1607 ***** P-R FPD-YF I-D
 DRB1*1608 ***** P-R F-D-YF N F-D
 DRB1*03011 EYSTS Y-D-YFH N F K-GR-N V
 DRB1*03012 ***** EYSTS Y-D-YFH N F K-GR-N V

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FIG. 27B

DRB1*03021	EYSTS	F-YFH-N	K-GR-N
H-			
DRB1*03022	EYSTS	F-YFH-N	K-GR-N
H--**			
DRB1*0303	*****YSTS	F-YFH-N	K-GR-N-V

DRB1*0304	*****EYSTS	Y-D-YFH-F	K-GR-N-V

DRB1*0305	*****-EYSTS	Y-D-YFH-N-F	K-GR-N

DRB1*0306	*****-EYSTS	Y-D-YFH-N	K-GR-N-V

DRB1*0307	EYSTS	F-D-YFH-N-F	K-GR-N-V
-H-			
DRB1*0308	EYSTS	Y-D-YFH-N-F-E	K-GR-N-V
-H-			
DRB1*0309	*****-EYSTS	Y-D-YFH-R-N-F	K-GR-N

DRB1*0310	EYSTS	Y-D-YFH-N-F-A-H	K-GR-N-V
-H-			
DRB1*0311	*****-EYSTS	Y-D-YFH-N-F	K-GQ-N-V

DRB1*04011	E-V-H	F-D-YF-H-Y	K-Y
E-			
DRB1*04012	*****-E-V-H	F-D-YF-H-Y	K

DRB1*0402	E-V-H	F-D-YF-H-Y	I-DE-V

DRB1*0403	E-V-H	F-D-YF-H-Y	E-V-Y
E-			
DRB1*0404	E-V-H	F-D-YF-H-Y	V-Y
E-			
DRB1*04051	E-V-H	F-D-YF-H-Y	S

DRB1*04052	*****-E-V-H	F-D-YF-H-Y	S

DRB1*0406	E-V-H	F-D-YF-H	E-V-Y
E-			
DRB1*0407	E-V-H	F-D-YF-H-Y	E

DRB1*0408	*****-E-V-H	F-D-YF-H-Y	

DRB1*0409	*****	F-D-YF-H-Y	S-K

DRB1*0410	*****-E-V-H	F-D-YF-H-Y	S-V

DRB1*0411	E-V-H	F-D-YF-H-Y	S-E-V-Y
E-			
DRB1*0412	*****-E-V-H	F-D-YF-H-Y	S-I-D-L-V

DRB1*0413	*****-H	F-D-YF-H-Y	K-V

DRB1*0414	*****	F-D-YF-H-Y	I-DE

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FIG. 27C

DRB1*0415 *****-E-V-H-F-D-YF-H-Y-E-F-D-V

 DRB1*0416 *****-F-D-YF-H-Y-Q-K

 DRB1*0417 *****-F-D-YF-H-Y-S-E

 DRB1*0418 *****-F-D-YF-H-Y-I-D-L-V

 DRB1*0419 *****H-F-D-YF-H-

 DRB1*0420 *****-F-D-YF-H-E

 DRB1*0421 *****E-V-H-F-D-YF-H-K

 DRB1*0422 *****E-V-H-F-D-YF-H-Y-K-GR-N-V

 DRB1*0423 *****-E-V-H-F-D-YF-H-Y-V-R

 DRB1*0424 *****-E-V-H-F-D-YF-H-Y-S-R

 DRB1*0425 *****-E-V-H-F-D-YF-H-Y-F-D-L-V

 DRB1*0426 *****-E-V-H-F-D-YF-H-Y-T-K

 DRB1*0427 *****-E-V-H-F-D-YF-H-Y-E-AV

 DRB1*11011 H-EYSTS-F-D-YF-Y-F-E-F-D
 H-
 DRB1*11012 H-EYSTS-F-D-YF-Y-F-E-F-D
 H-*
 DRB1*11013 *****-EYSTS-F-D-YF-Y-F-E-F-D

 DRB1*1102 H-EYSTS-F-D-YF-Y-F-E-I-DE-V
 H-
 DRB1*1103 H-EYSTS-F-D-YF-Y-F-E-F-DE-V
 H-
 DRB1*11041 H-EYSTS-F-D-YF-Y-F-E-F-D-V

 DRB1*11042 H-EYSTS-F-D-YF-Y-F-E-F-D-V
 H-
 DRB1*1105 *****-EYSTG-F-D-YF-Y-F-E-F-D

 DRB1*1106 *****-EYSTS-F-D-YF-Y-F-E-F-D-AV

 DRB1*1107 *****-EYSTS-F-D-YF-Y-F-E-K-GR-N-V

 DRB1*11081 *****S-F-D-YF-Y-F-E-D

 DRB1*11082 *****S-F-D-YF-Y-F-E-D

 DRB1*1109 *****-F-D-YFH-N-F-E-F-D

 DRB1*1110 *****-F-D-YFH-F-F-E-F-D

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FIG. 27D

DRB1*1111 *****S—F-D-YF—Y—F—E—F—DE—————

 DRB1*1112 *****—F-D-YF—F—F—E—F—D—————

 DRB1*1113 —EYSTS—F-D-YFH—F—F—E—R—V—————

 DRB1*1114 —EYSTS—F-D-YF—Y—F—E—I—DE—————

 DRB1*1115 —EYSTS—F-D-YF—DL—F—E—F—D—————
 H—
 DRB1*1116 *****—EYSTS—F-D-YFH—N—F—E—I—DE—V—————

 DRB1*1117 —EYSTS—F-D-YFH—F—E—R—E—V—————
 H—
 DRB1*1118 *****—EYSTS—F-D-YF—Y—F—E—I—D—V—————

 DRB1*1119 *****—EYSTS—F-D-YF—Y—F—E—I—D—————

 DRB1*1120 *****—EYSTS—F-D-YFH—N—F—E—I—DE—————

 DRB1*1121 *****—EYSTS—F-D-YF—Y—F—E—I—DE—AV—

 DRB1*1122 *****—E-V-H—F-D-YF—Y—F—E—F—D—————

 DRB1*1123 ****—EYSTS—F-D-YF—Y—F—E—F—D—L—————

 DRB1*1124 ****—EYSTS—F-D-YF—D—F—E—F—D—————

 DRB1*1125 ****—EYSTS—F-D-YF—Y—F—E—F—D—L—V—————

 DRB1*1126 *****—EYSTS—F-D-YF—Y—F—E—————

 DRB1*1127 *****—EYSTS—F-D-YF—Y—F—E—F—D—N—————

 DRB1*1128 *****—EYSTS—F-D-YF—N—F—E—F—D—————

 DRB1*1129 *****—EYSTS—F-D-YF—F—E—F—D—————

 DRB1*1130 *****—EL-S—F-D-YF—Y—F—E—F—D—————

 DRB1*1131 —EYSTS—F-D-YF—Y—F—E—H—I—D—————
 H—
 DRB1*1201 —EYSTG—Y—HFH—LL—F—V—S—I—D—AV—
 H—
 DRB1*12021 *****—EYSTG—Y—HFH—LL—F—V—S—F—D—————
 AV*****
 DRB1*12022 *****—EYSTG—Y—HFH—LL—F—V—S—F—D—AV—

 DRB1*12032 *****—EYSTG—Y—HFH—LL—F—V—S—I—D—V—————

 DRB1*1204 *****—EYSTG—Y—HFH—LL—F—E—I—D—————
 AV*****
 DRB1*1205 *****—EYSTG—Y—HFH—FL—F—V—S—I—D—AV—

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FIG. 27E

DRB1*1301 ——EYSTS——F-D-YFH—N——F——I-DE——V——
H——

DRB1*1302 ——EYSTS——F-D-YFH—N——F——I-DE——
H——

DRB1*13031 ——EYSTS——F-D-YF——Y——S——I-DK——
H——*

DRB1*13032 *****EYSTS——F-D-YF——Y——S——I-DK——

DRB1*1304 ——EYSTS——F-D-YF——Y——F——S——I-DE——V——
H——*

DRB1*1305 *****EYSTS——F-D-YFH—N——F——F-D——

DRB1*1306 *****F-D-YFH—N——F——I-D——V——

DRB1*13071 *****EYSTS——F-D-YF——Y——F-D——

DRB1*1308 *****EYSTS——F-D-YFH——F——I-DE——V——

DRB1*1309 *****EYSTS——F-D-YFH—N——F——I-A——V——

DRB1*1310 *****EYSTS——F-D-YFH—N——F——I-DK——V——

DRB1*1311 *****EYSTS——F-D-YF——Y——F——F-D——V——

DRB1*1312 *****EYSTS——F-D-YF——Y——S——I-D——

DRB1*1313 *****EYSTS——F-D-YF——Y——S——I-D-L——

DRB1*1314 *****TS——F-D-YF——Y——F——F-D——

DRB1*1315 *****EYSTS——F-YFH—N——F——I-DE——V——

DRB1*1316 *****EYSTS——F-D-YFH—N——F——I-DE——D——

DRB1*1317 ——EYSTG—Y——F-D-YF——Y——F——I-DE——V——
H——

DRB1*1318 *****EYSTS——F-D-YFH—N——F——F-D-L——V——

DRB1*1319 ——EYSTS——F-YFH——F——I-DE——V——H——
——

DRB1*1320 *****EYSTS——F-D-YFH—N——F——DE——V——

DRB1*1321 ——EYSTS——F-D-YF——Y——F——S——F-D——H——
——

DRB1*1322 ****EYSTS——F-D-YF——Y——F——I-DE——V——

DRB1*1323 ****EYSTS——F-D-YF——Y——F——I-DE——

DRB1*1324 ****EYSTS——F-D-YF——Y——F——F-DE——V——

DRB1*1325 ****EYSTS——F-D-YF——Y——F——D——

DRB1*1326 ****EYSTS——F-YFH—N——F-D——

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FIG. 27F

DRB1*1327 *****-EYSTS-Y-D-YFH-N-F-I-DE-V
 *****-EYSTS-F-D-YFH-N-F-I-DE-R-V
 *****-EYSTS-F-D-YFH-N-F-DE
 DRB1*1329 *****-EYSTS-F-D-YFH-N-F-S-I-D
 *****-EYSTS-F-D-YF-Y-F-S-I-D
 DRB1*1330 *****-EYSTS-F-D-YFH-N-F-V-I-DE
 *****-EYSTS-F-D-YFH-N-S-I-DE-V
 DRB1*1331 *****-EYSTS-F-D-YFH-N-S-I-DE
 *****-EYSTS-F-D-YF-Y-S-I-DK-N
 DRB1*1333 *****-EYSTS-F-D-YFH-F-A-H-R-E-V
 *****-EYSTS-F-YFH-N
 DRB1*1402 *****-EYSTS-F-YFH-N-D-L
 DRB1*1403 *****-EYSTS-F-YFH-N-A-H-R-E-V
 DRB1*1404 *****-EYSTG-Y-F-D-YFH-F-A-H-R-E-V
 DRB1*1405 *****-EYSTS-Q-F-D-YFH-F-R-E-V
 DRB1*1406 *****-EYSTS-F-YFH-N-V
 DRB1*1407 *****-EYSTS-F-D-YFH-F-A-H-R-E
 DRB1*1408 *****-EYSTS-F-D-YFH-F-H-R-E-V
 DRB1*1409 *****-EYSTS-F-D-YFH-N
 DRB1*1410 *****-E-V-H-F-D-YFH-F-A-H-R-E-V
 DRB1*1411 *****-EYSTG-Y-F-D-YFH-F-E-R-E
 DRB1*1412 *****-S-F-YFH-N-D-L
 DRB1*1413 *****-EYSTS-F-YFH-N-S
 DRB1*1414 *****-EYSTS-F-D-YFH-F-R-E
 DRB1*1415 *****-STG-Y-F-D-YFH-F-F-D-L-V
 DRB1*1416 *****-EYSTS-F-D-YFH-F-A-H-I-DE-V
 DRB1*1417 *****-EYSTS-F-D-YFH-N-F-V
 DRB1*1418 *****-EYSTS-F-YFH-N-R-E-V
 DRB1*1419 *****-EYSTS-F-YFH-N-K
 DRB1*1420 *****-EYSTS-F-YFH-F-V

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FIG. 27G

DRB1*1421 *****-EYSTS—F-D-YFH—N—F—K—V—
 *****-
 DRB1*1422 *****-EYSTS—F-D-YFH—F—A-H—F-D—
 *****-
 DRB1*1423 *****-EYSTS—F-D-YFH—F—R-E—V—
 *****-
 DRB1*1424 *****-EYSTS—F-YFH—N—I-A—
 H—
 DRB1*1425 *****-EYSTS—F-D-YF—Y—A-H—F-D—
 *****-
 DRB1*1426 *****-EYSTS—QF-D-YFH—F—A-H—R-E—V—
 —*****-
 DRB1*1427 *****-EYSTS—F-YFH—N—F-D-L—
 *****-
 DRB1*1428 *****-EYSTG-Y—F-D-YFH—F—A-H—R-E—
 AV*****-
 DRB1*1429 *****-EYSTS—F-YFH—N—AV—
 *****-
 DRB1*1430 *****-EYSTS—F-D-YFH—N—F—
 *****-
 DRB1*1431 *****-EYSTG-Y—F-D-YFH—F—A-H—R—V—
 *****-
 DRB1*0701 —Q—G-YK—QF-LF—F—V-S—I-D-GQ—V—
 H-E—
 DRB1*0703 *****-G-YK—QF-SLF—F—V-S—I-D-GQ—V—
 *****-
 DRB1*0801 —EYSTG-Y—F-D-YF—Y—S—F-D-L—
 *****-
 DRB1*08021 —EYSTG-Y—F-D-YF—Y—F-D-L—
 H—
 DRB1*08022 *****-EYSTG-Y—F-D-YF—Y—F-D-L—
 H—
 DRB1*08032 —EYSTG-Y—F-D-YF—Y—S—I-D-L—
 H—
 DRB1*08041 —EYSTG-Y—F-D-YF—Y—F-D-L—V—
 H—
 DRB1*08042 *****—F-D-YF—Y—F-D-L—V—
 *****-
 DRB1*08043 *****-EYSTG-Y—F-D-YF—Y—F-D-L—V—
 *****-
 DRB1*0805 *****-EYSTG-Y—F-D-YF—Y—S—F-D—
 *****-
 DRB1*0806 *****-EYSTG-Y—F-D-YF—Y—S—F-D-L—V—
 *****-
 DRB1*0807 *****-EYSTG-Y—F-D-YF—Y—V—F-D-L—
 *****-
 DRB1*0808 *****-EYSTG-Y—F-D-YF—Y—A-H—F-D-L—
 *****-
 DRB1*0809 *****—Y—F-D-YFH—F—F-D-L—
 *****-
 DRB1*0810 *****-EYSTG-Y—F-D-YF—Y—S—I-D-L—V—
 *****-
 DRB1*0811 *****-EYSTG-Y—F-D-YF—Y—A—F-D-L—

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FIG. 27H

DRB1*0812 *-*-*-*-*EYSTG-Y—F-D-YF—Y—S—I-D-L—AV—
DRB1*0813 *-*-*-*-*EYSTG-Y—F-D-YF—Y—D—L—
DRB1*0814 *-*-*-*-*EYSRG-Y—F-D-YF—Y—S—I-D-L—
DRB1*0815 *-*-*-*-*EYSTG-Y—F-D-YF—Y—H—I-D-L—
DRB1*0816 *-*-*-*-*EYSTG-Y—F-D-YF—D—S—F-D-L—
DRB1*0817 *-*-*-*-*EYSTG-Y—F-D-YF—Y—F—S—F-D-L—
DRB1*0818 *-*-*-*-*EYSTG-Y—F-D-YF—Y—S—I-D—
DRB1*0819 *-*-*-*-*EYSTG-Y—F-D-YF—Y—I—I-D-L—
DRB1*09012 —Q—K-D—Y-H-G—N—V-S—F-R—E—V—
H-E—
DRB1*1001 —EEV—RVH—YA-Y—R—Q—
—

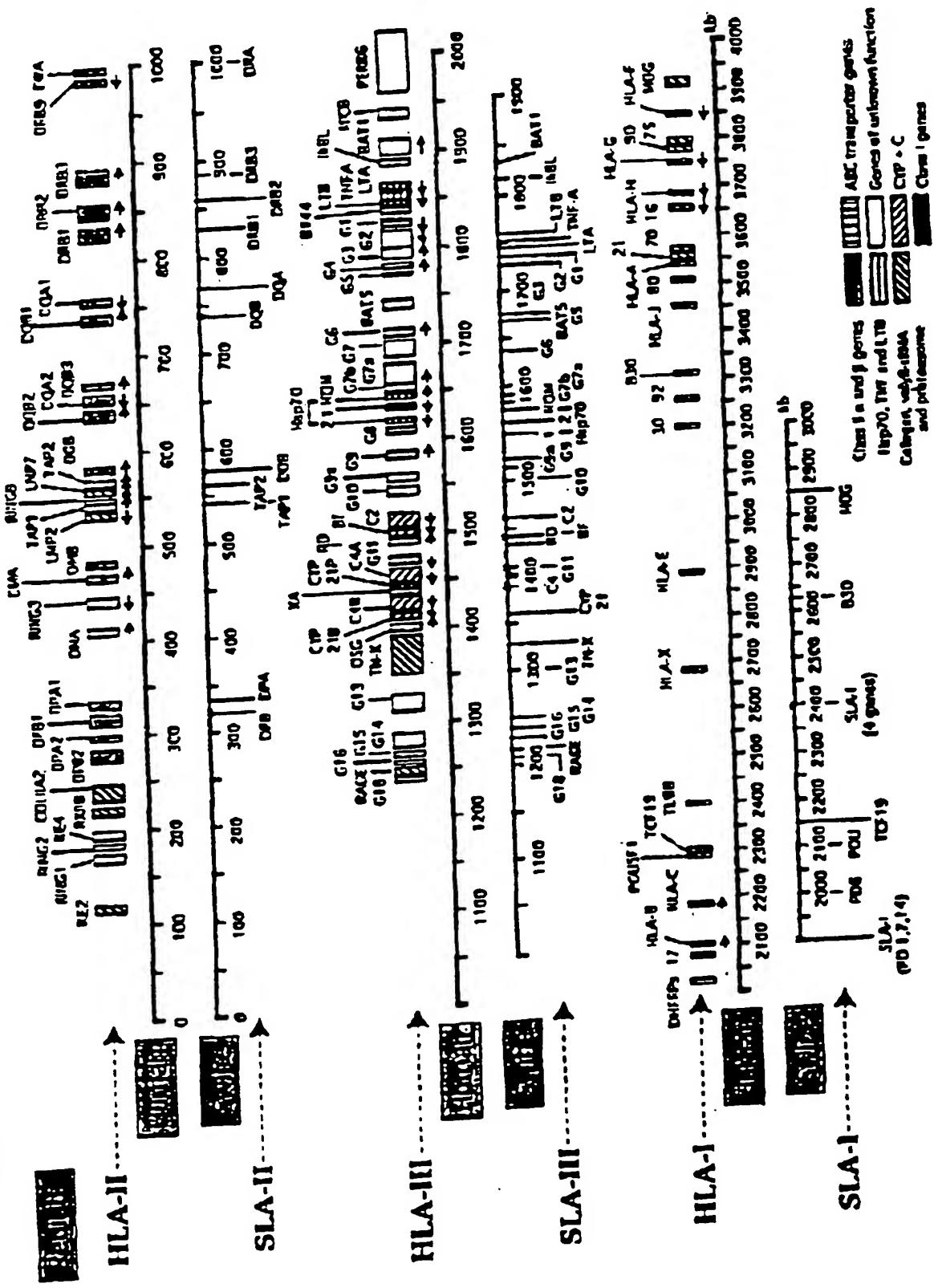
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FIG. 28



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FIG. 29

	1	50
Sladra-0102	-----	
Sladra-0202	-----	
Sladra-0203	-----	
Sladra-0101	-----	
Sladra-02011	-----	
Sladra-02012	-----	
Consensus	VENHVIIQAE FYLSPDKSGE FMFDFDGDEI FHVDMEKRET VWRLEFGHF	
	51	100
Sladra-0102	-----	
Sladra-0202	-----	m
Sladra-0203	-----	
Sladra-0101	-----	
Sladra-02011	-----	m
Sladra-02012	-----	m
Consensus	ASFEAQGALA NIAVDKANLE ILIKRSNNTP NTNVPPEVTV LSDKPVELGE	
	101	150
Sladra-0102	-----	
Sladra-0202	-----	
Sladra-0203	-----	
Sladra-0101	-----	
Sladra-02011	-----	
Sladra-02012	-----	
Consensus	PNILICFIDK FSPPVVNVTW LRNGSPVTRG VSETVFLPRE DHLFRKFHYL	
	151	200
Sladra-0102	-----	r
Sladra-0202	-----	
Sladra-0203	-----	
Sladra-0101	-----	
Sladra-02011	-----	
Sladra-02012	-----	
Consensus	PFMPSTEDVY DCQVERHWGLD KPLLKHWEFE AQTPLPETTE NTVCALGLIV	
	201	228
Sladra-0102	-----	
Sladra-0202	-----	h
Sladra-0203	-----	h
Sladra-0101	-----	
Sladra-02011	-----	
Sladra-02012	-----	
Consensus	ALVGIIIVGTV LIIGVVRKGN ATERRGPL	

Group 01 has a leucine at residue 72 and Group 02 has a methionine.
 No other polymorphisms have been found in the alpha 1 domain.

Amino Acid Sequences of SLA DRA Alleles

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FIG. 30

	1	24	44	50
Sladrb-T	--iaq--ffm g-s-----	y-qky l-----	l-f-----	
Sladrb-N	-----f- g-a-----	d-y f---d-y-----	f-e-----	
Sladrb-M	-----f- g-----	q-----	y-----	
Sladrb-Z	-----y-----	-----	l-----	
Sladrb-AD	-----	-----	-----	
Sladrb-C	--i-----q-----	q-n c---y-----	-----	
Sladrb-WX	-----v-h--r-----	l-d-y f-----	-----f-----	
Sladrb-Y	--i-----ffm g-s-----	y-lky l-----	l-e-----	
Consensus	RDTPPHFLHL LKFECHFFNG TERVRLLERQ	YYNGEEFVRF DSDVGEYRAV		
	51	64	81	100
Sladrb-T	-----	m k-v-----	-----	
Sladrb-N	--f-----	fm k-----v-----	e-e-----	r-----
Sladrb-M	-----n y-----	-----	ts-----	r-----
Sladrb-Z	-----v-d-----	-----	ts-----	r-----
Sladrb-AD	-----d-----	-----	-----	
Sladrb-C	-----r-----	a-----	-----	
Sladrb-WX	-----i-d s-s-i-----	ek-----	gvs-s-----	
Sladrb-Y	-----	-----	-----	
Consensus	TELGRPDAKY WNSQKDLLEQ	RRAEVDTYCR HNYRILDIFL VPRRAEPTVT		
	101			150
Sladrb-T	-----	-----	-----	
Sladrb-N	-----	-----	-----	
Sladrb-M	-----	-----	-----	
Sladrb-Z	-----	-----	-----	
Sladrb-AD	-----	-----	-----	
Sladrb-C	-----	-----	-----	
Sladrb-WX	-----	-----	-----	
Sladrb-Y	-----	-----	-----	
Consensus	VYPAKTQPLQ HHNLLVCSVT GFYPGHVEVR WFRNGQEEAA GVVSTGLIPN			
	151			200
Sladrb-T	-----	-----	-----	
Sladrb-N	-----	t-----s-----	-----	
Sladrb-M	-----	-----	-----	
Sladrb-Z	-----	-----	-----	
Sladrb-AD	-----	-----	-----	
Sladrb-C	-----	-----	-----	
Sladrb-WX	-----	-----	-----	
Sladrb-Y	-----	-----	-----	
Consensus	GDWTFQTMVM LETVPQSGEV YSCRVEHPSL TSPVTVEWRA RSESAQGKMM			
	201		237	
Sladrb-T	--v-----	-----	-----	
Sladrb-N	-----	-----	-----	
Sladrb-M	-----	-----	-----	
Sladrb-Z	--v-----	-----	-----	
Sladrb-AD	-----	-----	-----	
Sladrb-C	--v-----	-----	-----	
Sladrb-WX	-----	-----	-----	
Sladrb-Y	--v-----	-----	-----	
Consensus	SGIGGFVLGL LFVAVGLFIY FKNQKGRPAL QPTGLLS			

Amino Acid Sequence of SLA-DRB Alleles

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FIG. 31

						50
Sladqa-02021	-	-	-	-	-	g
Sladqa-02022	-	-	-	-	-	g
Sladqa-02023	-	-	-	-	-	g
Sladqa-0201	-	-	-	r	-	-
Sladqa-0101	-	-	-	r-f	-	q
Sladqa-0103	-	-	-	r-f	-	q
Sladqa-0102	-	-	-	f	-	-
Consensus	EDIAADHVAS	YGLNVYQSYG	PSGYYTAEFD	GDEEFYVDLE	KKETVWQLPL	
						100
Sladqa-02021	-	r	-	-	-	-
Sladqa-02022	-	r	-	-	-	-
Sladqa-02023	-	r	-	-	-	-
Sladqa-0201	-	-	-	-	-	-
Sladqa-0101	--e	-	l	-vt-	-	k
Sladqa-0103	--e	-	l	-vt-	-	s
Sladqa-0102	--e	-	l	-vt-	-	s
Consensus	FSKFTSFDPQ	GALRNIATAK	MNLNILIKRS	NNTAAVNQVP	EVTVFVPKSPV	
						150
Sladqa-02021	-	-	-	-	-	-
Sladqa-02022	-	-	-	-	-	-
Sladqa-02023	-	-	-	-	-	-
Sladqa-0201	-	-	-	-	-	-
Sladqa-0101	i	-	s	-	-	k
Sladqa-0103	i	-	s	-	-	k
Sladqa-0102	i	-	s	-	-	k
Consensus	MLGQPNTLIC	HVDNIFPPVI	NITWLKNHGS	VTEGFSETSF	LSKNDHSFLK	
						200
Sladqa-02021	-	-	-	-	-	-
Sladqa-02022	-	-	-	-	-	-
Sladqa-02023	-	-	-	-	-	-
Sladqa-0201	-	-	-	-	-	-
Sladqa-0101	-	-	-	-	-	-
Sladqa-0103	-	-	-	-	-	-
Sladqa-0102	-	-	-	-	-	-
Consensus	ISYLTFPLSD	DDFYDCKVERH	WGLDKPLLKH	WEPEIPAPMS	ELTETVVCAL	
						232
Sladqa-02021	-	-	-	-	-	-
Sladqa-02022	-	-	-	-	-	-
Sladqa-02023	-	-	-	-	-	-
Sladqa-0201	-	-	-	-	-	-
Sladqa-0101	-	-	-	-	-	-
Sladqa-0103	-	-	-	-	-	-
Sladqa-0102	-	-	-	-	-	-
Consensus	GLIVGLVGIV	VGTVFIIQGL	1	RSGGPSRHOG	SL	

Group 01 is 231 amino acids (deletion at 132) and Group 02 is 232 amino acids

Amino Acid Sequences of SLA-DQA Alleles

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FIG. 32

		50
Sladqb-D	1	v g y ws-d fl m y
Sladqb-D2		f g y ws-d fl m y
Sladqb-XA		g wv
Sladqb-Z		y l wv r
Sladqb-W		l t ya y
Sladqb-T		llt n y
Sladqb-Y		h t l
Sladqb-C		g l
Consensus		GRDSPQDFVY QFKFECYFFN GTQRVR-VAR YIYNQEEHVR FDSDVGEOFRA
		100
Sladqb-D	51	l ea
Sladqb-D2		l ea
Sladqb-XA		v
Sladqb-Z		e
Sladqb-W		s i t
Sladqb-T		t
Sladqb-Y		f t
Sladqb-C		s s m v r
Consensus		VTPLGRPDAD YWNGQKDYLE QKRAELDTVC KHNYQIEEGT TLQRRVQPTV
		150
Sladqb-D	101	
Sladqb-D2		
Sladqb-XA		
Sladqb-Z		
Sladqb-W		
Sladqb-T		
Sladqb-Y		
Sladqb-C		
Consensus		TISFSKREAL NHHNLLVCAV TDFYPSQVRV QWFRNGQEET AGVVSTPLIR
		200
Sladqb-D	151	
Sladqb-D2		
Sladqb-XA		
Sladqb-Z		
Sladqb-W		
Sladqb-T		
Sladqb-Y		
Sladqb-C		
Consensus		NGDWTYQVLV MLEMNLQRGD VYTCRVEHSS LQSPILVEWR AQSESAQSKM
		230
Sladqb-D	201	
Sladqb-D2		
Sladqb-XA		
Sladqb-Z		
Sladqb-W		
Sladqb-T		
Sladqb-Y		
Sladqb-C		
Consensus		LSGVGGFVLG LIFLGLGLFI RRSQKGLVR

Amino Acid Sequences of SLA-DQB Alleles